

Specialist Instructional Aide was added. The remainder of the schedules are approving for the 2018-2019 school year.

9.0 Curriculum

9.1 Curriculum & Instruction Policy #10- Demonstration of Mastery in Mathematics

Staff is recommending the retirement of this policy **Action**

9.2 Literacy Prep A, B, C, & D Course Outlines **Action**

9.3 Integrated Science A&B Course Outlines **Action**

10.0 Public Comment for Closed Session

11.0 Closed Session

1. Public Employee Performance Evaluation (Gov. Code 54957)
Title: Founding Executive Director **Action**

12.0 Report Out To Public Action Taken In Closed Session

1.

13.0 Board/Staff Discussion

14.0 Adjournment

6.1

Pacific View Charter School

A California Public School and Nonprofit 501 (c) (3) Corporation
3670 Ocean Ranch Blvd., Oceanside, California 92056
Phone # (760) 757-0161

Special Board of Trustees' Meeting Thursday, March 22, 2018 Board Minutes

1.0 Call to Order/Roll Call

President Brown called the meeting to order at 3:37pm. from 1200 Bromberg St #216 Mineola, TX 75773. Trustees' Walters, Taylor in attendance and Meyer absent.

2.0 Approval of Agenda

Moved by Trustee Taylor & seconded by Vice President Walters to approve the agenda as presented.

AYES: Brown, Walters, Taylor

NOES: None

ABSTAIN: None

ABSENT: Meyer

3.0 Pledge of Allegiance

The Pledge of Allegiance was let by Executive Director Campbell

4.0 Public Comment

None

5.0 Introductions

Kathi Cohen, Lead High School Teacher; Lori Bentley, Human Resources & Business Services Specialist; Gayl Johnson, Director of Student Services; Celia Hernandez, School Counselor; Kathy Meck, Lead K-8 Teacher

6.0 Executive Director's Report

- ✚ Attended the OUSD Board meeting to support Coastal Academy as their Charter was on the agenda for renewal
- ✚ Legal is working on updating our Charter to submit to OUSD. Our charter is not due until June 2019 but information received in meetings is that OUSD Board is concerned about Special Ed and declining enrollment. We want to be proactive and will submit our renewal application to OUSD in July or August in case we are not approved. This will give us time to submit to the County for renewal or State if needed
- ✚ Attending a potential partnership workshop with El Dorado for Special Ed Services. Goal is to move away from OUSD for the 18/19 school year

- ✚ The Pasta for Pennies drive is completed and our families and staff raised over \$1100 for the Leukemia/Lymphoma Society. Congratulations to Ms. D. Smith and Ms. Katie Q's office for winning this year's luncheon for their students
- ✚ ELPAC testing has been taking place for several days
- ✚ Our students went on a field trip to tour UCSD campus March 1. Students from the Moreno Valley site also came down to tour
- ✚ Celia our school counselor took some students to MiraCosta College for a tour of that campus
- ✚ Students have been participating in competitive sports with other Charter School students. At this time the students are playing soccer
- ✚ Budget meetings are being created for the 18/19 school year
- ✚ Enrollment- total 527 – Oside 383 – Moreno Valley 144

7.0 Consent Calendar

These agenda items are considered routine and will be approved in one action without discussion. If a Board Trustee requests that an item be removed from the consent calendar or a citizen wishes to speak to an item, the item will be considered under Action Items.

7.1 Moved by President Brown & seconded by Trustee Taylor to approve the Consent Calendar as presented.

AYES: Brown, Walters, Taylor,
 NOES: None
 ABSTAIN: None
 ABSENT: Meyer

8.0 Action/Discussion Items

8.1 Moved by President Brown & seconded by Vice President Walters to approve the 2018-19 School Calendar revised as presented.

AYES: Brown, Walters, Taylor
 NOES: None
 ABSTAIN: None
 ABSENT: Meyer

8.2, 3 & 4 Moved by President Brown and seconded by Trustee Taylor to approve the three school clubs- Dane, Dungeons & Dragons & ABC as presented

AYES: Brown, Walters, Taylor
 NOES: None
 ABSTAIN: None
 ABSENT: Meyer

8.5 Moved by Vice President Walters and seconded by President Brown to approve the California Energy Commission Prop 39 Energy Expenditure Plan as presented.

AYES: Brown, Walters, Taylor

NOES: None

ABSTAIN: None

ABSENT: Meyer

9.0 Board/Staff Discussion

- ✚ Visited with Bob Gleisberg and he agreed to consider coming back on our board when his term is done at OUSD

10.0 Adjournment

President Brown adjourned the meeting at 4:25 p.m.

Pacific View Charter School

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3670 Ocean Ranch Blvd., Oceanside, California 92056
Phone # (760) 757-0161

Special Board of Trustees' Meeting Monday, April 23, 2018 Board Minutes

1.0 Call to Order/Roll Call

President Brown called the meeting to order at 3:34pm. from 1200 Bromberg St #216 Mineola, TX 75773. Trustees' Walters, Taylor and Meyer in attendance.

2.0 Approval of Agenda

Moved by Trustee Taylor & seconded by Trustee Meyer to approve the agenda as presented.

AYES: Brown, Walters, Taylor, Meyer

NOES: None

ABSTAIN: None

ABSENT: None

3.0 Pledge of Allegiance

The Pledge of Allegiance was let by Executive Director Campbell

4.0 Public Comment

None

5.0 Introductions

Kathi Cohen, Lead High School Teacher; Celia Hernandez, School Counselor; Kathy Meck, Lead K-8 Teacher; Erin Gorence, Director of Curriculum

6.0 Action/Discussion Items

6.1 Moved by Trustee Taylor & seconded by President Brown to approve the El Dorado Agreement for Participation as presented.

AYES: Brown, Walters, Taylor, Meyer

NOES: None

ABSTAIN: None

ABSENT: None

6.2 Moved by President Brown and seconded by Trustee Taylor to approve the Special Education Local Plan Area Local Education Agency Assurance as presented

AYES: Brown, Walters, Taylor, Meyer

NOES: None

ABSTAIN: None

ABSENT: None

6.3 Moved by President Brown and seconded by Trustee Meyer to approve the McGraw Hill Education Quote – Impact Social Studies Manual Gr.10 as presented.

AYES: Brown, Walters, Taylor, Meyer

NOES: None

ABSTAIN: None

ABSENT: None

7.0 Board/Staff Discussion

✚ The Executive Director discussed the Special Board Meeting in May for Educational Specialist Job Descriptions

8.0 Adjournment

President Brown adjourned the meeting at 3:45 p.m.

Pacific View Charter School

A California Public School and Nonprofit 501 (c) (3) Corporation
3670 Ocean Ranch Blvd., Oceanside, California 92056
Phone # (760) 757-0161

Special Board of Trustees' Meeting Friday, May 25, 2018 Board Minutes

1.0 Call to Order/Roll Call

President Brown called the meeting to order at 3:34pm. from 1200 Bromberg St #216 Mineola, TX 75773. Trustees' Walters, and Meyer in attendance. Trustee Taylor absent

2.0 Approval of Agenda

Moved by Trustee Meyer & seconded by President Brown to approve the agenda as presented.

AYES: Brown, Walters, Meyer

NOES: None

ABSTAIN: None

ABSENT: Taylor

3.0 Pledge of Allegiance

The Pledge of Allegiance was let by Executive Director Campbell

4.0 Public Comment

None

5.0 Introductions

None

6.0 Action/Discussion Items

6.1 Moved by President Brown & seconded by Vice President Walters to approve the Psychologist Job Description as presented.

AYES: Brown, Walters, Meyer

NOES: None

ABSTAIN: None

ABSENT: Taylor

6.2 Moved by President Brown an seconded by Trustee Meyer to approve the Education Specialist Job Description as presented

AYES: Brown, Walters, Meyer

NOES: None

ABSTAIN: None

ABSENT: Taylor

6.3 Moved by President Brown and seconded by Trustee Meyer to approve the Instructional Aide Job Description after changing the title to Education Specialist Instructional Aide as presented.

AYES: Brown, Walters, Meyer

NOES: None

ABSTAIN: None

ABSENT: Taylor

7.0 Board/Staff Discussion

- ✚ The Executive Director informed the Board that her evaluation would be sent to them for the current year. The Board will forward their revisions to the President by June 8th.
- ✚ The Board was updated on graduation ceremony
- ✚ The Board was also updated on registration numbers

8.0 Adjournment

President Brown adjourned the meeting at 3:50 p.m.

7.1



PROPOSITION 39 – COOL ROOF – MORENO VALLEY

BACKGROUND

- 12.17.2017 - First Note Financial prepared and submitted on behalf of Pacific View Charter School an Energy Audit Report to California Energy Commission for our Prop. 39 Energy Expenditure Plan.
- 01.02.2018 - California Energy Commission approved our Energy Expenditure Plan Report granting Pacific View Charter School the sum of \$78,390.00 for installation of Cool Roof System at our Moreno Valley Facility.
- First Note Financial facilitated the bidding process releasing a Request for Proposals (RFP) on January 18, 2018 to fourteen (14) bidders and holding an onsite Bidder's Walkthrough on February 1, 2018.
- A total of three (3) proposals were received.
 - All Seasons Installation
 - Arithane
 - CI Services
- First Note Financial created the attached Pacific View Cool Roof Bids and Budget.
- PVCS staff met with our First Note Financial Project Manager, Leslie Pluma, to review all submitted bids.

STAFF RECOMMENDATION:

Staff recommends the acceptance of Arithane 10-year warranty bid in the amount of \$79,989.00 (attached).

Pacific View Charter Cool Roof Bids and Budget

Pacific View Charter Prop. 39 EEP Budget		LEA EEP Budget
Lighting -Interior	Line voltage retrofit of 1 lamp T8 fluorescent fixtures to LED	\$ 135.00
Lighting -Interior	Line voltage retrofit of 2 lamp T8 fluorescent fixtures to LED	\$ 3,542.40
Lighting -Interior	Line voltage retrofit of 3 lamp T8 fluorescent fixtures to LED	\$ 11,896.40
Lighting -Interior	Replace compact fluorescent lamps w/ LED fixtures	\$ 1,053.00
Lighting -Exterior	Replace compact fluorescent fixtures w/ LED fixtures	\$ 1,566.00
Lighting -Exterior	Replace HID fixtures w/ LED fixtures	\$ 1,485.00
Lighting Controls	Install (13) Occupancy Sensors	\$ 2,145.00
HVAC	Replace (5) Packaged HP w/ SEER 15	\$ 75,000.00
Cool Roof	Install Cool Roof for 12,060 sf, R-6.4	\$ 78,390.00
Solar	18.70 KW AC	\$ 68,162.68
Total		\$ 243,175.48

Company	Price	Under Budget	Over Budget	R-Value	Foam Thickness	Sq. Footage	Cost per Sq. Foot	Project duration	Warranty	Notes
All Seasons Insulation	\$102,067.00		\$ (23,677.00)	R-6.5	1 inch	16,179	\$6.31	16 consecutive working days	10 yr. warranty	
Arithane	\$79,989.00		\$ (1,599.00)	R-6.3	1 inch	14,509	\$5.51	13 days	10 yr. warranty	
	\$91,889.00		\$ (13,499.00)	R-6.3	1 inch	14,509	\$6.33	15 days	15 yr. warranty	
	\$99,489.00		\$ (21,099.00)	R-6.3	1 inch	14,509	\$6.86	20 days	20 yr. warranty	
C.I. Services, Inc	\$74,550.00	\$ 3,840.00		Silicone coating work only. It doesn't have R-value.	Silicone coating work only.	16,000	\$4.66	14 days	20 yr. warranty	Doesn't meet the Prop 39 requirements because the proposed coating doesn't have a R value.



Arithane Foam Products, Inc.

1530 N. Missile Way, Anaheim, CA 92801
Phone: 714-853-1586 Fax: 714-853-1595
Commercial License #277593

PROPOSAL & ACCEPTANCE

"High Performance Roofing" www.arithane.com

Page 1

CUSTOMER: First Note Finance
ADDRESS: 831 Pomona Avenue
CITY, ST. ZIP: Coronado, CA
PHONE: 619-481-9341
FAX:
CONTACT: Leslie Pluma
EMAIL: leslie@firstnotefinance.com

JOB: Pacific View Charter
ADDRESS: 22695 Alessandro Blvd
CITY, ST. ZIP: Moreno Valley, CA 92553
PHONE:
FAX:
CONTACT: John R. McClain - Project Manager; 951-808-2908
EMAIL: john.mcclain@arithane.com

DATE: 2/14/2018
JOB: 0

APPLICABLE SPECIFICATIONS FOR POLYURETHANE SPRAY FOAM ROOFING SYSTEM TO BE INSTALLED TO THE BUILDING REFERENCED ABOVE BASED ON 14,509 SQ. FT. plus vertical walls & edge metal

SPECIFICATIONS:

- Clean and prepare existing roof surface as necessary for the proper application of spray foam roofing system.
- Install new metal foam stop at perimeter, as needed.
- Mask as necessary to protect from overspray.
- Prime roof deck with SWD 2000 sealer at the rate of 1/2 gallons per 100 sq. ft. as necessary.
- Apply 1" inch thickness of SWD "Quik-Shield" 125 (2.5-3.0 lb.) density polyurethane foam to the roof surface, R6.3.
- Apply foam up walls and taper to: top inside edge
- Apply *SWD 1929-F "Quik-Shield" elastomeric base coating at the rate of 1 gallon per 100 sq. ft. in a contrasting color to top coat.
- Apply *SWD 1929-F "Quik-Shield" WHITE elastomeric top coating at the rate of 2 gallons per 100 sq. ft. (SWD "Quik-Shield" coating is Energy Star, CRRC California Title 24 Compliant with a solar reflectance of %82 and emittance of 91%.)
- Broadcast #8 rock into wet finish coat at the rate of 80 lbs. per 100 sq. ft
- Apply *SWD "Quik-Shield" cementitious coating to roof deck surface (durable walk deck reinforcement surface entire roof).
- Clean and detail premises to remove any j
- Issue 15 year NO LEAK renewable warranty.

Premium Roofing Upgrade - 20 yr Polyurethane Foam Roofing System with Cementitious Coating
 Insulated (min 1" R6.3); and Energy Star Title 24 Cool Roof (reducing energy costs and mechanical loads)
 Sustainable - Renewable Warranty (NRCA considers as system with the lowest life cycle costs)
 Lightweight - Typically does not require roof removal or roof related sheet metal
 Includes permit and allowance for prevailing wages
 Including reinforcement walk way from hatch to equipment (all proposals) Cement Coat Initial applicable box below if accepted

BASE PRICE: \$ 99,489.00

NOTES: Exclusions: Tapered Crickets or Sloping; Manufacturer NDL Warranty (see alternate); work based upon normal working hours
Qualifications: Owner to provide access/staging and parking adjacent to the building. Pricing based upon one mobilization.

OPTIONS:

Alternate: SWD Polyurethane Foam 15 year Roofing System with Acrylic Coating and 10 yr renewable warranty	\$91,889.00
Alternate: SWD Polyurethane Foam 10 year Roofing System with Acrylic Coating; 10 yr renewable warranty	\$79,989.00
Alternate: SWD Manufacturer NDL Warranty	add \$4,000.00

Initial applicable box below if accepted

TOTAL PRICE INCLUDING OPTIONS: \$

BUILDING PERMIT INCLUDED: YES THIS IS A PREVAILING WAGE BID: YES
BID BOND INCLUDED: NO

ACCEPTANCE OF PROPOSAL- The above prices, conditions, and specifications as well as the conditions herein have been read and are satisfactory and are hereby accepted. Final payment will be made promptly upon completion. You are authorized to do the work as specified.

Authorized Signature
Arithane Foam Products, Inc.

Customer Signature: _____

Payment Terms: PROGRESS PAYMENTS WITH 100% DUE UPON COMPLETION

Arithane installs the best materials in the industry manufactured by _____



This proposal may be withdrawn by us if not accepted within 30 days

Upon final payment ARITHANE will issue warranty specified above

"A NATIONAL AWARD WINNING COMPANY"

"Over 100 million square feet installed since 1972"



Member

KALT
JM



Ari-Thane Foam Roofing

1530 N. Missile Lane
Anaheim, CA 92801

P) 714-853-1586
F) 714-853-1595

Ari-Thane Foam Products, Inc.
#277593



Ari-Thane Foam Roofing Commercial, Inc.
#887190

Arithane Foam Roofing – License #277593

Arithane specializes in sustainable, energy star title 24 polyurethane foam roofing systems and cool roof restoration coatings. Arithane has over 40 years of experience and is a national award winning contractor 2012 and 2015. (www.arithane.com). Arithane Foam Roofing is fully insured and bondable.

Polyurethane Foam Roofing Systems have many benefits including: Insulated (added R value, 6.3"); CRRC Energy Star Title 24 Cool Roof (reducing energy costs and mechanical loads); Monolithic (fluid applied system encapsulates the roof, parapet walls and seals duct work); Lightweight (does not typically require existing roof removal or roof related sheet metal); Sustainable (Class A or Class B Foam Roofing with 10 yr – 20 yr renewable warranties). Spray Applied Polyurethane Foam Roofing is considered nationally as the system with the lowest life cycle costs.

CA License - #277593; Class C-2; C-39; C-61/D12; C15

FEID – 95-2777766

Principals – Steve Perkins CEO; Jim Perkins President; Greg Perkins Secretary Treasurer

Financial Institutions – Wells Fargo Capital Finance – 100 West Washington Street, 15th Floor, Phoenix AZ 85003

Bonding/Insurance – Arthur J Gallagher Risk Management – 6967 So River Gate Dr, Salt Lake City UT 84047

References

David Walker	Engine Real Estate	213-405-9784; david@enginerealestate.com
Rick Moses	Walton Construction Services	909-267-7777; rmoses@waltoncs.com
Tania Boysen	Primus Building Solutions	818-244-6900; tania.boysen@theprimusadvantage.com
Jeff Bell	Pacific Empire Builders	818-396-8878; jbelle@pebuilders.com

Other references:

Architects: WLC Architects; Architects Orange; Ware Malcomb; David Hildago; Pacific Design Group

Owners: Reynolds Buick GMC; Tustin GMC; Bates Company; Claremont Schools; City of Glendale; So California orthopedic Institute; Arroyo Hill; NMUSD (Newport Mesa Unified School District); Orange Lutheran HS

General Contractors: Level 10; McCormack Construction; Del Amo Const; Gardner Austin; Walton Construction Services; Mata Construction; Shangri-la; Bernards; Ford Development; Stanhope; Dreyfuss Construction



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277593

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Pacific View Charter

Submittal: SWD Urethane Spray Applied Polyurethane Foam Roofing System

Pursuant to your request and based upon our site inspection and the specification noted below, we are providing information for our **SWD Urethane Spray Applied Polyurethane Foam Roofing System**. All work to be performed in accordance with manufacturer recommendations and industry standards.

Summary of Work: Standard 10 year Polyurethane Foam Roofing System, 1" R6.3, 3 gallons of acrylic coating (1 gallon base coat, 2 gallons top coat) with 30# of granules. Provide contractor 10 year no leak renewable sustainable warranty.

Upon receipt of an approved submittal, a **prejob meeting** is required 10 days prior to anticipated start date to inspect the roof, verify all curbs are built and penetrations installed in accordance with manufacturer recommendations and to discuss sequencing of work. **Solar panels or other MEP that would restrict access to the roof need to be installed after final roof completion and final coatings.**

A **preconstruction coordination meeting** is recommended to review details with those trades interfacing with the roofing; and, all dimensions should be **field measured** (skylights; sheet metal pans; pelican hoods; accessories; etc.) after the foam and base coat are installed..

Standard Details (attached): Details for typical Parapet Wall; Skylights, Scuppers, Curb; Edge Condition are attached for reference. Please forward our submittal details to MEP trades along with **preconstruction design criteria (page 2)**. Please forward MEP details for our review;

I. List of Primary Products/Product Data) – ESR-2532 / ICC-ES Evaluation Report

SWD Quick-Shield 125 Polyurethane Foam

SWD Quik-Shield 2000 Roof Primer (as required);

SWD Quik-Shield 1929 F Acrylic Coating – CRRC #0658-0001

A-1 Grit Artic White - #11 granules

Sika 1A Caulking Sealant

Edge Metal

Standard Contractor Warranty



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277593

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II. Preconstruction Design Criteria:

Prejob meeting required when substrate has been signed off and all roof penetrations are secured or flashing provided, curbs are in and complete and crickets installed. Structural slope should be a min. of $\frac{1}{4}$ " sloped to drains with crickets $\frac{1}{2}$ ". GC to provide access, staging and laydown area; and discuss any special conditions, safety or environmental issues.

Application of SPF Foam is subject to minimum temperature of 60 degrees; and cannot be installed when wet. Ari-Thane will not be responsible for aesthetics or ponding. Finish Exterior Metal, MEP Ducting and Solar should be installed or protected until after final roof completion.

Drains are typically installed at the level of the deck and scuppers (GC verifies scupper size, location and quantity). Plumber to provide longer drain bolts and to refasten drain rings.

Curbs, Skylights, Vents & roof penetrations should be a min. of 8" above top of roofing; and spaced a min of 8" apart and away from waterways, drains, parapets and curbs. Sheet Metal Copings, Pans should be field measured. Flat Skylights not recommended (send Skylight details)

Window Washing Equipment (if applicable) – please call for recommended wheels to be used.

Solar Installations: Solar supports (if any) will need to be installed prior to the application of our roofing; and, Solar Panels and MEP that would restrict access to the roof (minimum height of solar panels & ducts 30') will need to be sequenced **after our final completion of our foam roofing system including coating** (protection of solar panels, accessories and lines, by others);

TI Alterations and Damage: Other trades to protect our completed work during and after construction; and, any new alterations or damages will need to be repaired at others cost.

III. Anticipated Durations – Anticipated Start Winter Break – Dec 24 – January 7, 2019

Prep – Foam and Base Coat – 6 days

Final Coating & Clean Up – 4 days

Please forward a copy of your current **construction schedule**; and let me know if you have any questions or if you need a **schedule of contract values**.

Arithane Foam Roofing – Contractor License #277593; ICC-ESR-2532

John R. McClain, Project Manager; 951-808-2908; john.mcclain@arithane.com



1530 N. Missile Lane
Anaheim, CA 92801

P) 714-853-1586
F) 714-853-1595

Ari-Thane Foam Products, Inc.
#277593



Ari-Thane Foam Roofing Commercial, Inc.
#887190

Ari-thane Foam Products Inc. – SWD Urethane Approved Contractor

Arithane specializes in sustainable, energy star title 24 polyurethane foam roofing systems and cool roof restoration coatings. Arithane has over 40 years of experience and is a national award winning contractor 2012 and 2015. (www.arithane.com). Arithane Foam Roofing is fully insured and bondable.

Polyurethane Foam Roofing Systems have many benefits including: Insulated (added R value, 6.3"); CRRC Energy Star Title 24 Cool Roof (reducing energy costs and mechanical loads); Monolithic (fluid applied system encapsulates the roof, parapet walls and seals duct work); Lightweight (does not typically require existing roof removal or roof related sheet metal); Sustainable (Class A or Class B Foam Roofing with 10 yr – 20 yr renewable warranties). Spray Applied Polyurethane Foam Roofing is considered nationally as the system with the lowest life cycle costs.

CA Contractors License - #277593; Class C-2; C-39; C-61/D12; C15; FEID – 95-2777766; DIR #1000013407

Principals – Steve Perkins CEO; Jim Perkins President; Greg Perkins Secretary Treasurer

Financial Institutions – Wells Fargo Capital Finance – 100 West Washington Street, 15th Floor, Phoenix AZ 85003

Bonding/Insurance – Arthur J Gallagher Risk Management – 6967 So River Gate Dr, Salt Lake City UT 84047

School References

Paul Dooley	High Tech High (15 bldgs)	858-354-8692	pdooley@hightechhigh.org
Jeremy Johnson	Orange Lutheran (250,000sf)	714-726-4492	jeremy.johnston@lhsoc.org
Sheryl Schubert	Discovery Charter Sylmar	818-897-1044	
Matt Jones	Claremont Colleges	909-607-3049	mjones@kecksci.claremont.edu

Other references

David Walker	Engine Real Estate	213-405-9784;	david@enginerealestate.com
Rick Moses	Walton Construction Services	909-267-7777;	rmoses@waltoncs.com
Tania Boysen	Primus Building Solutions	818-244-6900;	tania.boysen@theprimusadvantage.com
Jeff Bell	Pacific Empire Builders	818-396-8878;	jbelle@pebuilders.com

Architects

WLC Architects; Architects Orange; Ware Malcomb; David Hildago; Pacific Design Group

Other Contractors: Level 10; Gardner Austin; McCormack; Del Amo Construction; Dreyfus Construction

BID FORM

NAME OF BIDDER: ARITHANE FOAM PRODUCTS INC,
ARITHANE FOAM ROOFING

The undersigned, hereby declare that we have carefully examined the location of the proposed Work, and have read and examined the Contract Documents, including all plans, specifications, and all addenda, if any, for the following Project:

PROJECT NAME

We hereby propose to furnish all labor, materials, equipment, tools, transportation, and services, and to discharge all duties and obligations necessary and required to perform and complete the Project for the following TOTAL BID PRICE:

BASE BID	BID PRICE (IN WRITTEN FORM)	BID PRICE (IN NUMBERS)
TOTAL BID PRICE	Seventy nine thousand Nine hundred eighty nine \$ 00/100 dollars —	\$79,989.00

In case of discrepancy between the written price and the numerical price, the written price shall prevail.

Please place initial beside document to verify receipt list below:

- WORKER'S COMPENSATION CERTIFICATE
- INFORMATION ABOUT BIDDER
- VERIFICATION AND EXECUTION
- FINGERPRINT REQUIREMENTS
- FINGERPRINT REQUIREMENTS (SUBCONTRACTORS – 1 for each Sub-Contractor)
- DRUGFREE WORKPLACE CERTIFICATION

**CONTRACTOR'S CERTIFICATE REGARDING
WORKERS' COMPENSATION**

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract.

Name of Bidder ARI-THANE FORM PRODUCTS/INC,
ARITHANE FORM ROOFING

Signature 

Name JOHN R. MCCLAIN

Title PROJECT MANAGER

Dated 2-27-18

A. INFORMATION ABOUT BIDDER

****Indicate not applicable ("N/A") where appropriate.****

1.0 Name of Bidder: ARI-THANE FOAM PRODUCTS INC
2.0 Type, if Entity: CORPORATION
3.0 Bidder Address: 1530 N. MISSILE WAY
ANAHEIM CA 92801

Contractor's License Number 277593; C-39

PWC Registration Number DIR# 100013407

714-853-1595 714-853-1586
Facsimile Number Telephone Number

4.0 How many years has Bidder's organization been in business as a Contractor?
43 YEARS

5.0 How many years has Bidder's organization been in business under its present name?
43 YEARS

5.1 Under what other or former names has Bidder's organization operated?:

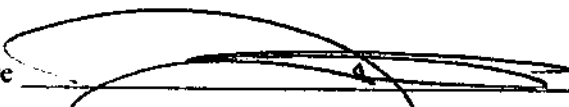
6.0 List Trade References:
SEE ATTACHED REFERENCES

INFORMATION REQUIRED OF BIDDERS

B. VERIFICATION AND EXECUTION

These Bid Forms shall be executed only by a duly authorized official of the Bidder:

I declare under penalty of perjury under the laws of the State of California that the foregoing information is true and correct:

Name of Bidder ARLETHANE FOAM PRODUCTS INC
Signature 
Name JOHN R. RUCCIANI
Title PROJECT MANAGER
Dated 2-27-18

QUIK-SHIELD 125-2.5

2.5 lb. Roofing Spray Foam



QUIK-SHIELD® 125-2.5 is a closed-cell, spray-applied polyurethane roofing foam. It creates a monolithic, water resistant barrier that stops air infiltration and provides excellent insulation.

HIGH PERFORMANCE:

- Effective insulating material
- Seamless air barrier
- Severe storm resistant

LEAK RESISTANT:

- No mechanical fasteners
- No seams
- Self-flashing

TYPICAL PHYSICAL PROPERTIES*:

Nominal Density Range (lb/ft ³)	D-1622	2.4-2.6
Water Vapor Permeance (perms/in)	E-96	1.4
Dimensional Stability (%)	D-2126 ¹	3
¹ TAS 110- Miami-Dade- 28 days, at 70° C, 100% RH		
Shear Strength (psi)	C-273	51.9
Compressive Strength (psi)	D-1621	40-45
Tensile Strength (psi)	D-1623	60-65
Wind Uplift (plywood deck psf)	TAS 114-95J	-165
Wind Uplift (steel deck psf)	TAS 114-95D	-1005
Closed Cell, content (%)	D-6226	>90
Air Leakage (L/s/m ²)	E-283	0.002
Noise Absorption (coefficient)	C-423	0.20

PROCEDURE

VALUES

RELATIVE INSULATION VALUES (aged):

R-value at 1"	6.3
---------------	-----

HANDLING PROPERTIES at 77°F (25°C):

	A SIDE (ISO)	B SIDE (RESIN)
Viscosity, cps	250±50	800±100
Specific Gravity	1.23	1.18

RECOMMENDED PROCESSING INFORMATION (ADDITIONAL DETAILS ON BACK):

Dispensing Ratio	1:1
Hose Heaters	120-140° F (49-60° C)
Primary Heaters (A&B)	120-140° F (49-60° C)
Dynamic Pressure (A&B)	1000 psi minimum
Static Pressure (A&B)	1100-1400 psi
Ambient Temperature**	40-130° F (4-54° C)
Substrate Temperature**	40-180° F (4-82° C)

**Temperatures outside this range are possible, contact SWD for more information

RECOMMENDED DECK TEMPERATURE FOR PROCESSING:

QS125-2.5W (winter)	45-60° F (7-16° C)
QS125-2.5I (intermediate)	65-75° F (18-24° C)
QS125-2.5S (summer)	75-90° F (24-32° C)

MIXING (ADDITIONAL DETAILS ON BACK):

- Do not mix
- Do not recirculate

RECOMMENDED STORAGE AND SHELF LIFE (ADDITIONAL DETAILS ON BACK):

- Storage temperatures 40-100°F** (4-38° C). See back for preconditioning of material.
- Shelf life from date of manufacture (unopened containers):
 - A-Side (iso): 12 months
 - B-Side (resin): 6 months
- Keep container tightly sealed.
- Store out of direct sunlight, in a cool dry place, avoid freezing.

*Properties achieved in a lab environment at 77°F. Field conditions may cause variation in properties.

** Caution: If the drum temperature is 80°F (26.6°C) or higher, use caution when opening the drum! The contents will be under pressure.

APPROVALS/ COMPLIANCE:

- ICC ESR-2532
- E-108 UL 790 Class A/B Roof System
- UL Class A/B approval # R9303, Const. # 136, 181, 206
- UL Class II #R7332; California Fire Marshal Listing No. 040175-1321:100; City of Los Angeles RR-24072; Miami-Dade County Product Control approved No. 14-1124.02, 14-1124.03, 14-1124.04, 14-1124.05



FIRE RATED ASSEMBLIES:

- Class A and B-UL Roofing Systems R9303
- Class A Combustible Deck-UL Roofing Systems R9303 Assembly #35
- 2 Hour Class A-UL Design P904
- 3 Hour Class A-UL Design P733 and P826

PACKAGING:

- 275 Gallon Tote
- 55 Gallon Drum

FINISHED PRODUCT COLOR:

White to off-white (material is not color stable, UV exposure will cause discoloration)

WARRANTY:

SWD Urethane offers material limited warranties on Quik-Shield® 125-2.5 roofing foam, free of inspection or fees. System limited warranties are available at an additional cost. All roof warranties must be registered with SWD. See SWD Urethane Warranty Program for required coating thickness and details.

LEED INFORMATION:

- Quik-Shield® 125-2.5 has a minimum of 9.8% total renewable/recycle content
- 1.8% pre-consumer recycled
- 4.9% post-consumer recycled
- 3.1% rapidly renewable



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QUIK-SHIELD 125-2.5

Roofing Spray Foam

PREPARATION OF SUBSTRATES

Providing the proper substrate is the responsibility of the owner, the owner's appointed representative, the contractor, and/or inspector. The following are manufacturer's recommendations. However, other preparation techniques may be required given unique/specialized application circumstances. Contact SWD for technical questions.

It is recommended to remove dust, dirt, oil, latents, paint, and alternative polymers from all surfaces prior to applying SWD products. All penetrations through the roof, including drains, scuppers, miscellaneous pipe and vent penetrations and electrical conduits, should be completed prior to starting of work. See SWD specifications or SPFA guidelines for further details on substrate preparation.

SWD Urethane warranties have specific preparation requirements. Contact SWD for warranty details.

WOOD

- Ensure wood is relatively dry and protect surfaces from contamination.
- Water or oil present may cause poor adhesion or excessive foaming.
- Plywood joints in excess of ¼" should be taped or filled with a suitable sealant material, prior to application of polyurethane foam.
- If needed, prime the wood deck with Quik-Shield 1000 or 2000. Contact SWD for recommendations.

STEEL & OTHER METALS

- Metal surfaces should be free of all rust, scale, dirt, grease, oil, chalking, paint, or other contaminants.
- It is the responsibility of the contractor/end user to determine proper adhesion and suitability. Blasting and priming is not always required. Contact SWD for recommendations.
- If priming, use Quik-Shield 1000 or 2000 at the rate of ½ gallon per 100 square feet.

CONCRETE

- If applying foam to concrete, the concrete surface should be structurally sound, clean, and dry/cured (typically 28 days).
- Fill large voids with appropriate backer rods or appropriate fillers.
- Blasting and priming is not always required. It is the responsibility of the contractor/end user to determine proper adhesion and suitability. Contact SWD for recommendations.
- If priming, use Quik-Shield 1000 or 2000 at the rate of ½ gallon per 100 square feet.

PREVIOUSLY APPLIED FOAM or OTHER POLYMERS

- As practical, remove previously applied foam and other polymer products. Application of product over existing materials should be performed only after adhesion/compatibility is verified

OTHER SUBSTRATES

- It is the responsibility of the contractor/end user to determine proper adhesion and suitability. Contact SWD for recommendations.

PROCESSING

1. It is recommended to precondition material to 70-80°F prior to application. Material may thicken at lower temperatures which can cavitate pumps.
2. Do not mix.

3. Product should be sprayed with a high pressure plural-component proportioner capable of a minimum of 1000psi dynamic pressure and a maximum pressure differential of 200psi between resin and isocyanate.
4. Static pressure is typically set between 1100 and 1400psi.
5. Primary heaters and hose heaters are typically set between 120 - 140°F. Higher temperatures are utilized in winter months, lower temperatures are utilized in summer months.
6. Proper application temperature setting is the responsibility of the end user. Equipment temperature varies and can be dependent on equipment, hose length, elevation, ambient temperature, substrate temperature humidity, and other factors. Contact an SWD representative for further recommendations.

APPLICATION

See SWD roofing specifications for more detailed application recommendations.

1. Clean surfaces according to "Preparation of Substrates" section.
2. If priming, ensure primer is adequately cured prior to application.
3. Substrate temperatures should be between 40-180°F. Higher and lower application temperatures are possible, contact an SWD representative for more details.
4. Flush an adequate amount of material through the lines/gun prior to spraying desired surface when changing between systems. Flush amount will be dependent on prior system used. Contact an SWD representative for more details.
5. Recirculation is not necessary.
6. Foam should be applied in minimum ½" thick passes and maximum 1½" thick passes to achieve the specified thickness, except where tapering is required to facilitate proper roof drainage.
7. It is recommended that the polyurethane foam be applied to the full specified thickness in any area on the same day.
8. Do not spray if surface moisture is present.
9. Before application, test material to ensure that material sprays, cures, and hardens properly.
10. Inspect applied material intermittently to ensure no problems exist. If problems are detected, discontinue application and inspect all substrates, equipment, gun, and liquid material for problem source(s).

CLEANING AND MAINTENANCE

1. Spray equipment must be maintained in proper operating condition. Failure to adequately maintain spray equipment may result in poor product performance. Refer to your equipment manufacturer's maintenance procedures for more details.
2. Contact SWD for long-term equipment storage recommendations.



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TDS-QS125-2.5 05-17 Rev 2

The information herein is believed to be reliable; however, unknown risks may be present. SWD Urethane makes no warranty, expressed or implied, concerning this product's merchantability or fitness for any particular use. The product will meet the written liquid component specifications as indicated on the technical data sheet published at the time of the purchase. The entirety of SWD Urethane's responsibility is limited only to the cost of the SWD material. The foregoing constitutes SWD Urethane's sole obligation with respect to damages, whether direct, incidental or consequential, resulting from the use or performance of the product.

Safety is the responsibility of the owner, the owner's appointed representative, the contractor, and/or inspector. Become familiar with local, state, and federal regulations regarding chemical health, safety, and handling. For more information consult the product SDS, contact the SPFA (www.sprayfoam.org) or the ACC (www.spraypolyurethane.org).

QUIK-SHIELD 1929 F

Flame Retardant Acrylic Coating

QUIK-SHIELD® 1929 F is a high solids, heat resistant, water based, elastomeric coating material made from 100% acrylic polymers. It prevents degradation to roofing caused by normal weathering, aging, and ultraviolet exposure.

BENEFITS:

- Fire Retardants
- Mildew Retardants
- Rust Inhibitors
- Odor Free
- Fast Drying
- Environmentally safe

TYPICAL PHYSICAL PROPERTIES*:

Solids by Weight (%)	
Solids by Volume (%)	
Viscosity (krebs)	
Low Temp Flexibility (-15° F, 3000 hrs.)	
Tensile Strength (psi @ 75° F)	D-412
Tensile Strength (psi @ 0° F)	D-2370
Elongation at Break (% @ 75° F)	D-412
Elongation at Break (% @ 0° F)	D-2370
Hardness	Shore A
Surface Burning Flame (index)	E-84
Surface Burning Smoke (index)	E-84
Water Vapor Permeance (perms @ 20 mils)	E-96
Water Absorption (% @ 75° F)	D-2842
Foam Adhesion Failure, Dry (peak)	D-413
Foam Adhesion Failure, Wet (peak)	D-413

PROCEDURE

VALUES

	70 ± 5
	60 ± 5
	96-102
	Pass
	280
	299
	355
	255
	60
	10
	15
	3.5
	5
	6.1
	3.5

APPROXIMATE COVERAGE:

Dry Mills/100 sqft/gallon	8.3 mils
5 Year Material Limited Warranty	16 mils/2 gal/100 sqft
10 Year Material Limited Warranty	24 mils/3 gal/100 sqft
15 Year Material Limited Warranty	32 mils/4 gal/100 sqft

RECOMMENDED PROCESSING INFORMATION (ADDITIONAL DETAILS ON BACK):

- Can be applied by brush, roller, or airless sprayer.
- High pressure airless sprayer
 - Minimum 1000 psi
 - No filter
 - Hose 3/8" minimum spray line
 - Tip 619-645
 - Substrate Temperature: 50-130° F (10-54° C)**

**Temperatures outside this range are possible, contact SWD for more information

MIXING (ADDITIONAL DETAILS ON BACK):

- Mixing not necessary.

STORAGE AND SHELF LIFE:

- Storage temperatures 50-100°F (10-38° C). See back for preconditioning of material.
- Six month shelf life from date of manufacture (unopened containers):
- Keep container tightly sealed.
- Store out of direct sunlight, in a cool dry place, avoid freezing.

APPROVALS/ COMPLIANCE:

- ICC ESR-2532
- California Fire Marshal Listing No. 040175-1321:100, 2280-1321:102
- Class A rated roof system component
- General purpose flame retardant coating
- City of Los Angeles RR-24072, Miami-Dade County #06-1204.03, CRRC #0658-0001
- CRRC, LEED, Energy Star compliant



CRRC & ENERGY STAR COMPLIANT (ON WHITE-COLORED COATING):

Solar Reflectance Index	103%
Solar Reflectance	82%
Thermal Emittance	91%



FLAME RETARDANT:

- UL 723 rated Class I
- UL 790 rated Class A
- Meets coating requirements for UL Roof Systems #136, 181, 206
- California Fire Marshall listed as a component of Class A rated roof systems and as a "general purpose fire retardant chemical coating."

PACKAGING:

275 Gallon Tote
55 Gallon Drum

FINISHED PRODUCT COLOR:

White, Buff, Santa Fe Buff, Tan, Light Gray, Dark Gray (Colors can vary slightly from each container)

WARRANTY:

SWD Urethane offers 5 to 15 year material limited warranties and 5 to 20 year system warranties on Quik-Shield® 125 roofing foam when coated with Quik-Shield® 1929F. All roof warranties must be registered with SWD. See SWD Urethane Warranty Program for required coating thickness and details.

*Properties achieved in a lab environment at 77°F. Field conditions may cause variation in properties.



SWD Urethane

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sales@swdurethane.com

QUIK-SHIELD 1929F

Flame Retardant Acrylic Coating

PREPARATION OF SUBSTRATES

Providing the proper substrate is the responsibility of the owner, the owner's appointed representative, the contractor, and/or inspector. The following are manufacturer's recommendations. However, other preparation techniques may be required given unique/specialized application circumstances. Contact SWD for technical questions.

It is recommended to remove dust, dirt, oil, latents, paint, and alternative polymers from all surfaces prior to applying SWD products.

See NRCA and SPFA guidelines for further details on substrate preparation.

SPRAY FOAM

- Coating should be applied 2-24 hours after installation of foam. Beyond 24 hours, contact SWD for recommendations.
- Avoid contaminating surface of foam after foam installation.
- Blow off surface of foam, as necessary, before application of coating.

STEEL & OTHER METALS

- Metal surfaces should be free of all rust, scale, dirt, grease, oil, chalking, paint or other contaminants.
- It is the responsibility of the contractor/end user to determine proper adhesion and suitability. Contact SWD for recommendations.

CONCRETE

- The concrete surface should be fully cured, structurally sound, clean, and dry.

PREVIOUSLY APPLIED FOAM or OTHER POLYMERS

- As practical, remove previously applied foam and other polymer products. Application of product over existing materials should be performed only after adhesion/compatibility is verified.

OTHER SUBSTRATES

- It is the responsibility of the contractor/end user to determine proper adhesion and suitability. Contact SWD for recommendations.

PROCESSING

1. Mixing is not necessary.
2. Product can be applied by brush, roller, or airless sprayer
3. Clean with a thorough water flush.
4. Contact an SWD representative for further recommendations.

APPLICATION

1. Clean surfaces according to "Preparation of Substrates" section.
2. Ambient/substrate temperatures should be between 50-130°F. Higher and lower application temperatures are possible, contact SWD representative for more details.
3. Flush an adequate amount of material through the lines/gun prior to spraying desired surface when changing between systems. Flush amount will be dependent on prior system used. Contact an SWD representative for more details.
4. Before application, test material to ensure that material sprays, cures, and hardens properly.
5. Inspect applied material intermittently to ensure no problems exist.

If problems are detected, discontinue application and inspect all substrates, equipment, gun, and liquid material for problem source(s).

6. Never allow liquid components to run out.
7. Allow product to cure a minimum of 4 to 6 hours before recoating.

CLEANING AND MAINTENANCE

1. Spray equipment must be maintained in proper operating condition. Failure to adequately maintain spray equipment may result in poor product performance. Refer to your equipment manufacturer's maintenance procedures for more details.
2. Contact SWD for long-term equipment storage recommendations.

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Safety is the responsibility of the owner, the owner's appointed representative, the contractor, and/or inspector. Become familiar with local, state, and federal regulations regarding chemical health, safety, and handling. For more information consult the product SDS, contact the SPFA (www.sprayfoam.org) or the ACC (www.spraypolyurethane.org).



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TDS-QS1929F 05-16 Rev 3



QUIK-SHIELD® | 2020 Cementitious Roof Coating

QUIK-SHIELD® | 2020 cementitious roof coating system provides building owners the most durable foam roofing system available.

QUIK-SHIELD® | 2020 is comprised of cement and proprietary resin. This system not only increases the durability and life-span of the roof, it also adds increased fire protection as a class A roof assembly, even on a combustible wood deck.

QUIK-SHIELD® | 2020 prevents degradation to roofing caused by normal weathering, aging and ultraviolet exposure. It includes special fire retardants, mildew retardants and rust inhibitors that help extend the service life of any roofing system.

QUIK-SHIELD® | 2020 is easy and convenient to apply. It is fast drying, odor free and environmentally safe.



QUIK-SHIELD® | 2020 :
an ideal heavy-duty cool roofing solution.

A cool roof reflects and emits the sun's heat back into the sky instead of transferring it into the building.

A cool roof can:

- Increase indoor comfort by keeping a building cooler in the summer months.
- Reduce energy costs. Studies have shown that cool roof coating can lead to energy savings of 30-40%.
- Address air pollution and global warming concerns by lowering CO₂ and other emissions associated with fossil fuel generated electricity.
- Reduce "urban heat island effect" by reflecting heat back into the atmosphere.
- Pay for itself. The California energy commission cites cases of a 2-5 yr payback for installing a cool roof.

Source: Cool Roof Rating Council



Tested & Approved

QUIK-SHIELD® | 2020 is ICC, UL, and FM.
The cementitious roof system is also CRRC,
Energy Star & LEED compliant.



Underwriters
Laboratories



SWD Urethane Mesa, Arizona
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QUIK-SHIELD® | 2020

Cementitious Roof Coating—Specifications

ACCEPTANCE & COMPLIANCE

APPROVALS/ COMPLIANCE:

ICC ESR-2532
 Class A Roof System
 Class A Combustible Deck—UL Roofing Systems R9303 Assembly #35
 UL: File R-9303 Construction # 136, 181, 206
 FM Global
 LEED
 CRRC: #0658-0002

CRRC & ENERGY STAR COMPLIANT:

Solar Reflectance Index (SRI)	101%
Solar Reflectance	81%
Thermal Emittance	87%

WARRANTY:

SWD Urethane offers 5 to 15 year material limited warranties and 5 to 20 year system warranties on Quik-Shield® |125 roofing foam when coated with Quik-Shield® |2020. All roof warranties must be registered with SWD. See SWD Urethane Warranty Program for required coating thickness and details.

PHYSICAL PROPERTIES

CEMENTITIOUS BATCH:

30-45 Gallons (114-170 L) water (variability based on site conditions)
 10 Bags Quik-Shield cementitious mix (40 Pounds ea.(18 kg))
 5 Gallons (19 L) Quik-Shield proprietary resin

Batch applied on top of 640-800 Pounds (290-363 kg) white crushed limestone

APPROXIMATE COVERAGE:

1 bag Quik-Shield Cementitious mix/100 sf

COLOR:

White

PHYSICAL PROPERTIES (Proprietary Resin):

Polymer Type	Acrylic
Nonvolatile Content (%)	46-48
pH	7.5-9.5
Viscosity (cps)	100
Density (g/ml)	1.04-1.08

PROCESSING INFORMATION

STORAGE & SHELF LIFE (Cementitious Mix):

- Storage temperatures 50-100°F (10-38° C)
- One year shelf life from date of manufacture (unopened bags)
- Keep bag tightly sealed
- Store in a cool dry place, avoid freezing

STORAGE & SHELF LIFE (Proprietary Resin):

- Storage temperatures 50-80°F (10-27° C)
- Six months shelf life from date of manufacture (unopened containers)
- Keep container tightly sealed
- Store out of direct sunlight, in a cool dry place, avoid freezing

EQUIPMENT:

- Can be applied by hand or concrete sprayer

MIXING:

- Mix thoroughly before application

APPLICATION:

- Coat roof with two coats of Quik-Shield® 1929F and #6 limestone granules, as per specifications. Quik-Shield® 2020 top coat applied at a rate of 1 bag per 100 sf.
- Substrate temperature:50-130°F (10-54° C)
- Substrate surfaces must be free of moisture, oil, grease, dust and debris.

HEALTH & SAFETY:

SWD Urethane is committed to the health and safety of our customers. SWD and Quik-Shield® products shall only be installed by a SWD Urethane certified contractor. Applicators are required to follow all proper handling, safety and installation procedures. For more information consult the product MSDS, contact the SPFA (www.sprayfoam.org) or the ACC (www.spraypolyurethane.org).

The information herein is believed to be reliable; however, unknown risks may be present. SWD Urethane makes no warranty, expressed or implied, concerning this product's merchantability or fitness for any particular use. The only warranty SWD Urethane gives is that the product meets the specifications listed herein, and in the event that it does not, SWD Urethane will replace, at its cost, SWD Urethane's product. The foregoing constitutes SWD Urethane's sole obligation with respect to damages, whether direct, incidental or consequential, resulting from the use or performance of the product.



SWD Urethane Mesa, Arizona swdurethane.com 800-828-1394



QUIK-SHIELD® | 2000

Low VOC Primer

QUIK-SHIELD® | 2000 is an excellent VOC compliant primer-sealer that ensures maximum adhesion between the roofing substrate and QUIK-SHIELD® |125 roofing foam. It is specifically designed to meet California building code requirements.

QUIK-SHIELD® | 2000 is an integral part of any foam roofing system because it has been specifically designed to improve adhesion of rigid polyurethane foam to almost any roofing substrate including

- Asphalt
- Modified
- BUR
- Smooth Surfaced
- Metal
- Single Ply
- Concrete

QUIK-SHIELD® | 2000 is also designed for use on acrylic coated roofing to prepare for re-coatings. It is ideal for use with existing spray polyurethane foam roofing to prepare for re-coating or transition from traditional roof coatings to an acrylic based coatings.



QUIK-SHIELD® | 2000 : **Part of an ideal roofing solution.**

Today's foam roofing systems provide more than ever. A top quality foam roofing system delivers:

- High insulation value
- Increased structural stability
- Optimum air-barrier performance

The foundation for any foam roofing solution is the primer coating. QUIK-SHIELD® | 2000 is the ideal primer for new roofing systems. Applied directly to the roof deck, the primer ensures maximum adhesion of the roof foam. An ideal roofing system is topped off with a high reflectivity coating.

SWD offers complete roofing system solutions that have proven results. From primer to foam to coating, each component is specifically designed work together.





QUIK-SHIELD® | 2000

Low VOC Primer—Specifications

ACCEPTANCE & COMPLIANCE

APPROVALS/ COMPLIANCE:

ICC ESR-2532

DESIGNED USE:

Quik-Shield® | 2000 is designed to be applied as a low VOC primer for Quik-Shield® | 125 roofing foam. The primer is required for use when spraying roofing foam to metal or concrete decks.

PHYSICAL PROPERTIES

APPROXIMATE COVERAGE:

Wood	200 sq.ft./gallon
Metal	200 sq.ft./gallon

PHYSICAL PROPERTIES:

Type	Neoprene
Weight / Gallon (lbs)	6.6
Solids (%)	10
Viscosity (cps)	200

PROCESSING INFORMATION

STORAGE & SHELF LIFE:

- Storage temperatures 60-89°F (16-27° C)
- Six months shelf life from date of manufacture (unopened containers)
- Keep container tightly sealed.
- Store out of direct sunlight, in a cool dry place, avoid freezing.

EQUIPMENT:

- Can be applied by brush, roller, or airless sprayer
- High pressure airless sprayer
 - Minimum 1000 psi
 - No filter
 - Hose 3/8" minimum spray line
 - Tip 517-531

MIXING:

- Mixing not required.

APPLICATION:

- Substrate temperature:50-130°F (10-54° C)
- Substrate surfaces must be free of moisture, oil, grease, dust and debris.
- Under normal clear weather conditions spray foam can be applied after 2 hour cure time (cure time will be faster at higher temperatures).
- Required for applying Quik-Shield® | 125 roofing foam to metal and concrete decks. Not needed for wood decks.

HEALTH & SAFETY:

SWD Urethane is committed to the health and safety of our customers. SWD and Quik-Shield® products shall only be installed by a SWD Urethane certified contractor. Applicators are required to follow all proper handling, safety and installation procedures. For more information consult the product MSDS, contact the SPFA (www.sprayfoam.org) or the ACC (www.spraypolyurethane.org).

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QUIK-SHIELD® | 2120

High Solids Silicone Roof Coating

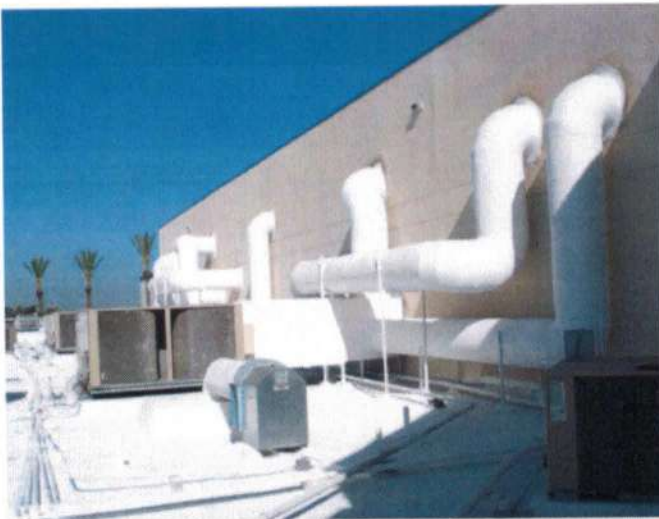
QUIK-SHIELD® | 2120 is a high solids, single component, VOC compliant, moisture cure fluid applied silicone coating.

It is an ideal coating for all types of roofing including

- Spray polyurethane foam (SPF)
- Built-up
- Single-ply
- Metal
- Concrete

QUIK-SHIELD® | 2120 prevents degradation to roofing caused by normal weathering, aging and ultraviolet exposure, which helps extend the service life of any roofing system.

QUIK-SHIELD® | 2120 is easy and convenient to apply. It is fast drying and odor free. It is also ideal for applications to walls, tanks, silos and many other surfaces requiring a protective coating.



QUIK-SHIELD® | 2120 : **an ideal cool roofing solution.**

A cool roof reflects and emits the sun's heat back into the sky instead of transferring it into the building.

A cool roof can:

- Increase indoor comfort by keeping a building cooler in the summer months.
- Reduce energy costs. Studies have shown that cool roof coating can lead to energy savings of 30-40%.
- Address air pollution and global warming concerns by lowering CO₂ and other emissions associated with fossil fuel generated electricity.
- Reduce "urban heat island effect" by reflecting heat back into the atmosphere.
- Pay for itself. The California energy commission cites cases of a 2-5 yr payback for installing a cool roof.

Source: Cool Roof Rating Council





QUIK-SHIELD® | 2120

High Solids Silicone Roof Coating—Specifications

ACCEPTANCE & COMPLIANCE

ENERGY STAR COMPLIANT:

Solar Reflectance Index (SRI)	110%.
Solar Reflectance (white)	87%
Thermal Emissivity (white)	89%

FLAME RETARDANT:

UL 790 rated Class A Non-Combustible and Class B Combustible as tested over spray foam and single ply roofing systems.

WARRANTY:

SWD Urethane offers 5 to 15 year material limited warranties and 5 to 20 year system warranties on Quik-Shield® |125 roofing foam when coated with Quik-Shield® |2120. All roof warranties must be registered with SWD. See SWD Urethane Warranty Program for required coating thickness and details.

PHYSICAL PROPERTIES

APPROXIMATE COVERAGE:

Wet Mills / 100 sf / gallon	15
5 Year Material Limited Warranty	18 mils/1.2 gal/100 sf
10 Year Material Limited Warranty	20 mils/1.3 gal/100 sf
15 Year Material Limited Warranty	25 mils/1.7 gal/100 sf

COLORS:

White, Tan, Light Gray, Dark Gray

PHYSICAL PROPERTIES:

Solids by Weight (%)	96±2
Solids by Volume (%)	96±2
Specific Gravity	1.30

PHYSICAL PROPERTIES:

	Procedure	Values
Tensile Strength (psi @ 73°F)	D-412	331
Tensile Strength (psi @ 0°F)	D-412	432
Elongation at Break (% @ 73°F)	D-412	192
Elongation at Break (% @ 0°F)	D-412	216
Tear Resistance (die C lb f/in)	D-624	37.5
Hardness (shore A)	D-2240	50±5
Water Vapor (perms)	E-96	5.9
Water Absorption (% , 2 weeks)	D-471	0.1
Weathering / UV Resistance (8,760hrs)	G-53	no degradation
VOC (EPA method 24, g/l)	D-3960	<10

PROCESSING INFORMATION

STORAGE & SHELF LIFE:

- Storage temperatures 35-75°F (2-24° C)
- Six months shelf life from date of manufacture (unopened containers)
- Keep container tightly sealed.
- Store out of direct sunlight, in a cool dry place, avoid freezing.
- Silicone product must be used immediately after opening container

EQUIPMENT:

- Can be applied by brush, roller, or airless sprayer.
- To prevent equipment damage, contractors wishing to use airless spray equipment should be experienced with silicone products.
- High pressure airless sprayer
 - Minimum 3500 psi (gun 5000 psi)
 - 5:1 Transfer pump
 - Hose 3/4" BUNA-N jacketed hose (dedicated to silicone)
 - Tip min .030 and 50° Fan
 - Minimum 3 gallons / min.

MIXING:

- Mix on high speed for 5 minutes before application.

APPLICATION:

- Substrate temperature: 50-130°F (10-54° C)
- Substrate surfaces must be free of moisture, oil, grease, dust and debris.
- Should not be used if rain is expected within 1 hour of application
- Coating should be applied 2-72 hours after foam installation.
- Tack free 1 hour, cure time 2-8 hours.

HEALTH & SAFETY:

SWD Urethane is committed to the health and safety of our customers. SWD and Quik-Shield® products shall only be installed by an SWD Urethane approved contractor. Applicators are required to follow all proper handling, safety and installation procedures. For more information consult the product MSDS, contact the SPFA (www.sprayfoam.org) or the ACC (www.spraypolyurethane.org).

The information herein is believed to be reliable; however, unknown risks may be present. SWD Urethane makes no warranty, expressed or implied, concerning this product's merchantability or fitness for any particular use. The only warranty SWD Urethane gives is that the product meets the specifications listed herein, and in the event that it does not, SWD Urethane will replace, at its cost, SWD Urethane's product. The foregoing constitutes SWD Urethane's sole obligation with respect to damages, whether direct, incidental or consequential, resulting from the use or performance of the product.



Product Data Sheet
Edition 1.29.2018
Sikaflex-1a

Sikaflex®-1a

One part polyurethane, elastomeric sealant/adhesive

SEALANT - WATERPROOFING & RESTORATION INSTITUTE

Issued to: Sika Corporation
Product: Sikaflex®-1A
C719: Pass Ext.+35% Comp.-35%

Substrate: Mortar, Aluminum, Glass
(mortar substrate primed with Sika Primer 429)

Validation Date: 1/24/18 - 1/23/23

No. 0108-SQ123 Copyright © 2018

SEALANT VALIDATION
www.swrionline.org

Description	Sikaflex-1a is a premium-grade, high-performance, moisture-cured, 1-component, polyurethane-based, non-sag elastomeric sealant. Meets Federal specification TT-S-00230C, Type II, Class A. Meets ASTM C-920, Type S, Grade NS, Class 35, use T, NT, O, M, G, I, A; Canadian standard CAN/CGSB 19.13-M87.
Where to Use	<ul style="list-style-type: none"> ■ Designed for all types of joints where maximum depth of sealant will not exceed 1/2 in. ■ Excellent for small joints and fillets, windows, door frames, reglets, flashing, common roofing detail applications, and many construction adhesive applications. ■ Suitable for vertical and horizontal joints; readily placeable at 40°F. ■ Has many applications as an elastic adhesive between materials with dissimilar coefficients of expansion. ■ Submerged conditions, such as canal and reservoir joints.
Advantages	<ul style="list-style-type: none"> ■ Eliminates time, effort, and equipment for mixing, filling cartridges, pre-heating or thawing, and cleaning of equipment. ■ Fast tack-free and final cure times. ■ High elasticity - cures to a tough, durable, flexible consistency with exceptional cut and tear-resistance. ■ Stress relaxation. ■ Excellent adhesion - bonds to most construction materials without a primer. ■ Excellent resistance to aging, weathering. ■ Proven in tough climates around the world. ■ Odorless, non-staining. ■ Jet fuel resistant. ■ Certified to the NSF/ANSI Standard 61 for potable water. ■ Urethane-based; suggested by EPA for radon reduction. ■ Paintable with water-, oil- and rubber-based paints. ■ Capable of ±35% joint movement.
Chemical Resistance	Good resistance to water, diluted acids, and diluted alkalines. Consult Technical Service for specific data.
Packaging	10.1 fl. oz. (300 mL), 20 fl. oz. (591 mL), 4.5 gal (17 L) in a 5 gal pail, 52 gal (197 L) in a 55 gal drum

Typical Data (Material and curing conditions @ 73°F (23°C) and 50% R.H.)

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

Shelf Life	10.1 fl. oz. cartridges	12 months
	20 fl. oz. uni-pac sausages	12 months
	5 gallon pail	6 months
	55 gallon drum	6 months
Storage Conditions	Store at 40°-95°F (4°-35°C). Condition material to 65°-75°F before using.	
VOC Content	40 g/L	
Colors	White, colonial white, aluminum gray, limestone, black, dark bronze, capitol tan, stone and medium bronze. Special architectural colors on request.	
Application Temperature	40° to 100°F. Sealant should be installed when joint is at mid-range of its anticipated movement.	
Service Range	-40° to 170°F	
Curing Rate	Tack-free time	3 to 6 hours
	Tack-free to touch	3 hours
	Final cure	4 to 7 days
Tear Strength (ASTM D-624)	55 lb./in.	
Shore A Hardness (ASTM C-661)	21 day	40±5
Movement Capability (ASTM C-719)	+/- 35%	
Tensile Properties (ASTM D-412)	21 day	Tensile Stress
		175 psi (1.21 MPa)
		Elongation at Break
		550%
		Stress at 100%
		85 psi (0.59 MPa)
Adhesion in Peel (TT-S-00230C, ASTM C 794)	Substrate	Peel Strength
	Concrete	20 lb.
	Aluminum	20 lb.
	Glass	20 lb.
		Adhesion Loss
		0%
		0%
		0%
Weathering Resistance	Excellent	



PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://USA.SIKA.COM/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

Coverage

10.1 oz Cartridge: Yield in Linear feet				
Depth		1/4"	3/8"	1/2"
Width	1/4"	24.3		
	3/8"	16.2	10.8	
	1/2"	12.1	8.1	6.1
	3/4"	8.1	5.4	4.0
	1"			3.0
	1.25"			2.4
	1.5"			2.0

20 oz Sausage: Yield in Linear feet				
Depth		1/4"	3/8"	1/2"
Width	1/4"	48.1		
	3/8"	32.1	21.4	
	1/2"	24.1	16.0	12.0
	3/4"	16.0	10.7	8.0
	1"			6.0
	1.25"			4.8
	1.5"			4.0

1 gallon: Yield in Linear feet				
Depth		1/4"	3/8"	1/2"
Width	1/4"	307.9		
	3/8"	205.3	136.8	
	1/2"	153.9	102.6	77.0
	3/4"	102.6	68.4	51.3
	1"			38.5
	1.25"			30.8
	1.5"			25.7

How to Use

Surface Preparation

Clean all surfaces. Joint walls must be sound, clean, dry, frost-free, and free of oil and grease. Curing compound residues and any other foreign matter must be thoroughly removed. A roughened surface will also enhance bond. Install bond breaker tape or backer rod to prevent bond at base of joint.

Priming

Priming is not usually necessary. Most substrates only require priming if testing indicates a need or where sealant will be subjected to water immersion after cure.

Consult Sikaflex Primer Technical Data Sheet or Technical Service for additional information on priming.

Application

Recommended application temperatures: 40°-100°F.

For cold weather application, condition units at approximately 70°F; remove prior to using. For best performance, Sikaflex-1a should be gunned into joint when joint slot is at mid-point of its designed expansion and contraction. Place nozzle of gun into bottom of the joint and fill entire joint. Keep the nozzle in the sealant, continue on with a steady flow of sealant preceding the nozzle to avoid air entrapment. Avoid overlapping of sealant to eliminate entrapment of air.

Tooling and Finishing

Tool sealant to ensure full contact with joint walls and remove air entrapment. Joint dimension should allow for 1/4 inch minimum and 1/2 inch maximum thickness for sealant. Proper design is 2:1 width to depth ratio. For use in horizontal joints in traffic areas, the absolute minimum depth of the sealant is 1/2 in. and closed cell backer rod is recommended.

Removal

Use personal protective equipment (chemical resistant gloves/goggles/clothing). Without direct contact, remove spilled or excess product and placed in suitable sealed container. Dispose of excess product and container in accordance with applicable environmental regulations.

Over Painting

Allow 1-week cure at standard conditions when using Sikaflex-1a in total water immersion situations and prior to painting.

Limitations

- When overcoating with water, oil and rubber based paints, compatibility and adhesion testing is essential.
- Sealant should be allowed to cure for 7 days prior to overcoating.
- Avoid exposure to high levels of chlorine. (Maximum continuous level is 5 ppm of chlorine.)
- Maximum depth of sealant must not exceed 1/2 in.; minimum depth is 1/4 in.
- Maximum expansion and contraction should not exceed 25% of average joint width.
- Do not cure in the presence of curing silicone sealants.
- Avoid contact with alcohol and other solvent cleaners during cure.
- Do not apply when moisture-vapor-transmission condition exists from the substrate as this can cause bubbling within the sealant.
- Use opened cartridges and uni-pac sausages the same day.
- When applying sealant, avoid air-entrapment.
- Since system is moisture-cured, permit sufficient exposure to air.
- White color tends to yellow slightly when exposed to ultraviolet rays.
- Light colors can yellow if exposed to direct gas fired heating element.
- The ultimate performance of Sikaflex-1a depends on good joint design and proper application with joint surfaces properly prepared.
- The depth of sealant in horizontal joints subject to traffic is 1/2 in.
- Do not tool with detergent or soap solutions.
- Do not use in contact with bituminous/asphaltic materials.

PRIOR TO EACH USE OF ANY SIKA PRODUCT, THE USER MUST ALWAYS READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS ON THE PRODUCT'S MOST CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET WHICH ARE AVAILABLE ONLINE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING SIKA'S TECHNICAL SERVICE DEPARTMENT AT 800.933.7452 NOTHING CONTAINED IN ANY SIKA MATERIALS RELIEVES THE USER OF THE OBLIGATION TO READ AND FOLLOW THE WARNINGS AND INSTRUCTIONS FOR EACH SIKA PRODUCT AS SET FORTH IN THE CURRENT PRODUCT DATA SHEET, PRODUCT LABEL AND SAFETY DATA SHEET PRIOR TO PRODUCT USE.

KEEP CONTAINER TIGHTLY CLOSED. KEEP OUT OF REACH OF CHILDREN. NOT FOR INTERNAL CONSUMPTION. FOR INDUSTRIAL USE ONLY. FOR PROFESSIONAL USE ONLY.

For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety related data. Read the current actual Safety Data Sheet before using the product. In case of emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Safety Data Sheet which are available online at <http://usa.sika.com/> or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Safety Data Sheet prior to product use.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS. SALE OF SIKA PRODUCTS ARE SUBJECT SIKA'S TERMS AND CONDITIONS OF SALE AVAILABLE AT [HTTP://USA.SIKA.COM/](http://usa.sika.com/) OR BY CALLING 201-933-8800.

Visit our website at usa.sika.com

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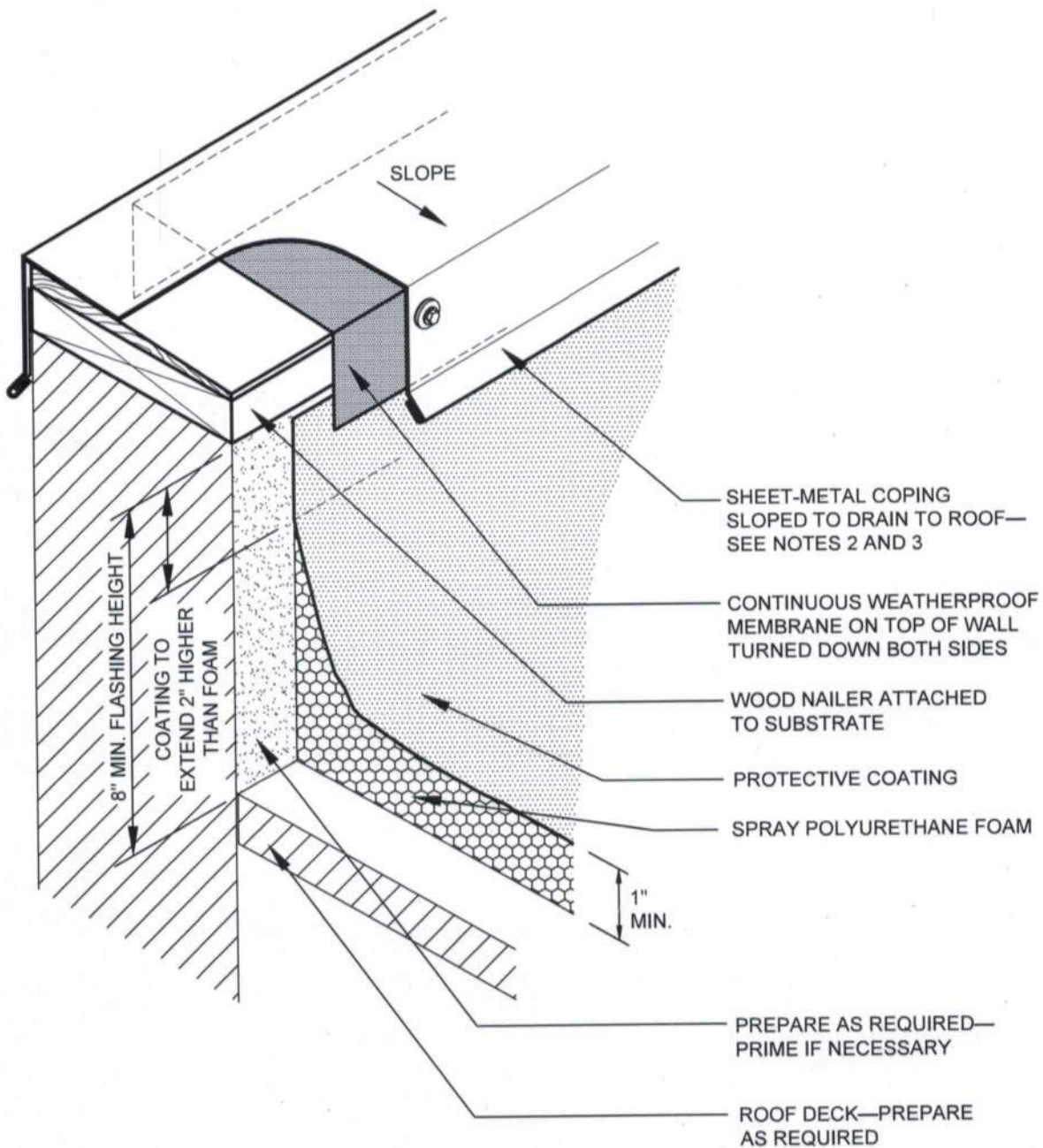
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NOTES:

1. THIS DETAIL DOES NOT ALLOW FOR DIFFERENTIAL MOVEMENT BETWEEN THE DECK AND WALL. SEE DETAIL SPF-4 FOR EXPANSION JOINT AT A DECK-TO-WALL LOCATION.
2. REFER TO THE ARCHITECTURAL METAL FLASHING SECTION OF THE NRCA ROOFING MANUAL: ARCHITECTURAL METAL FLASHING, CONDENSATION CONTROL AND REROOFING FOR DESIGN, JOINERY AND SECUREMENT OPTIONS FOR COPINGS.
3. REFER TO THE INTRODUCTION IN CHAPTER 8—CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

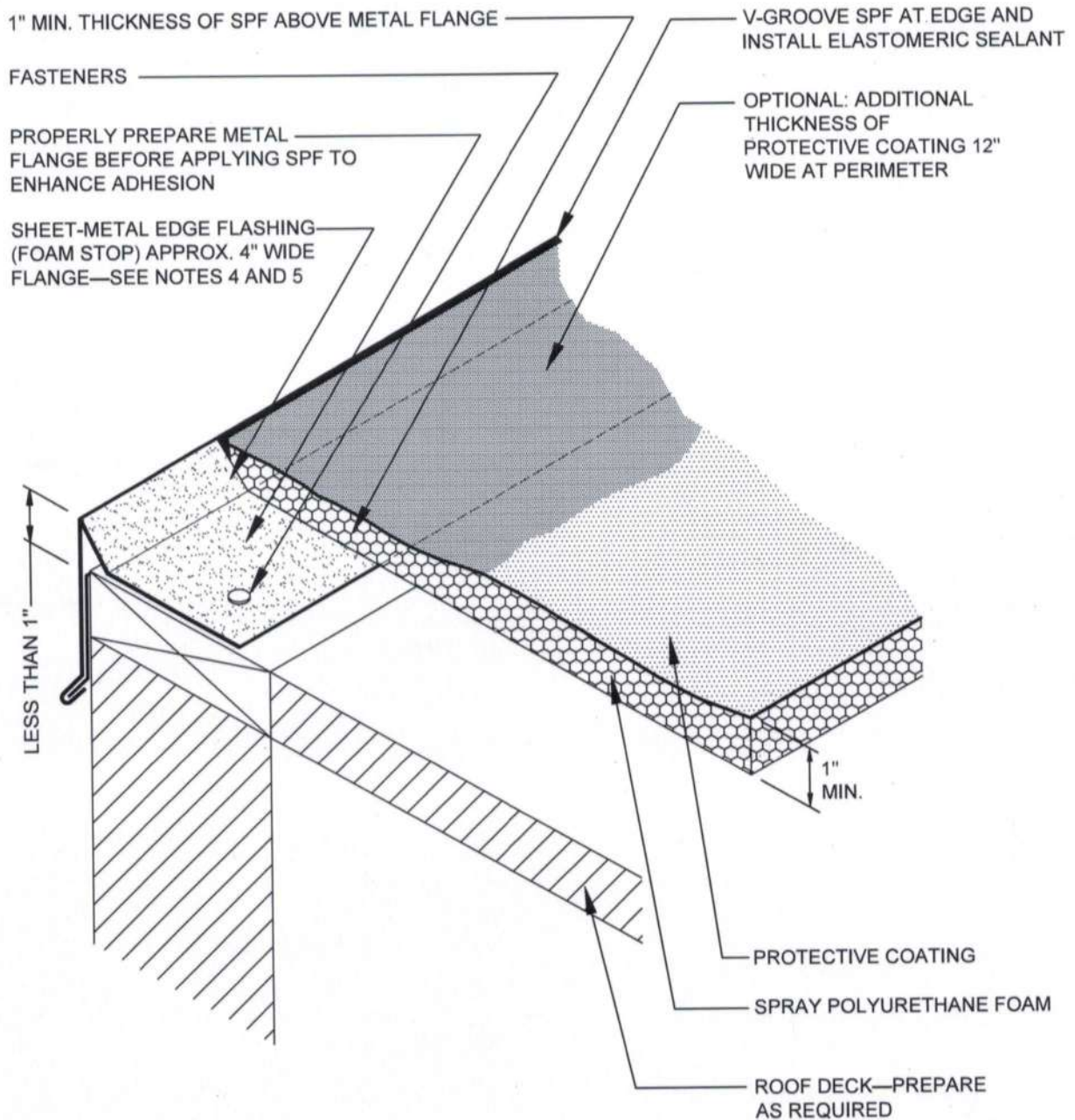


BASE FLASHING AT PARAPET WALL WITH METAL COPING

2012

NOT DRAWN TO SCALE

SPF-1



NOTES:

1. WHERE THE SPF IS TRIMMED OR GROUND FLUSH, ADDITIONAL COATING THICKNESS IS REQUIRED.
2. THIS DETAIL SHOULD BE USED ONLY WHEN THE DECK IS SUPPORTED BY THE OUTSIDE WALL.
3. ELASTOMERIC SEALANT TO BE COMPATIBLE WITH COATING.
4. REFER TO THE ARCHITECTURAL METAL FLASHING SECTION OF THE NRCA ROOFING MANUAL: ARCHITECTURAL METAL FLASHING, CONDENSATION CONTROL AND REROOFING FOR DESIGN, JOINERY AND SECUREMENT OPTIONS FOR COPINGS.
5. REFER TO THE INTRODUCTION IN CHAPTER 8—CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

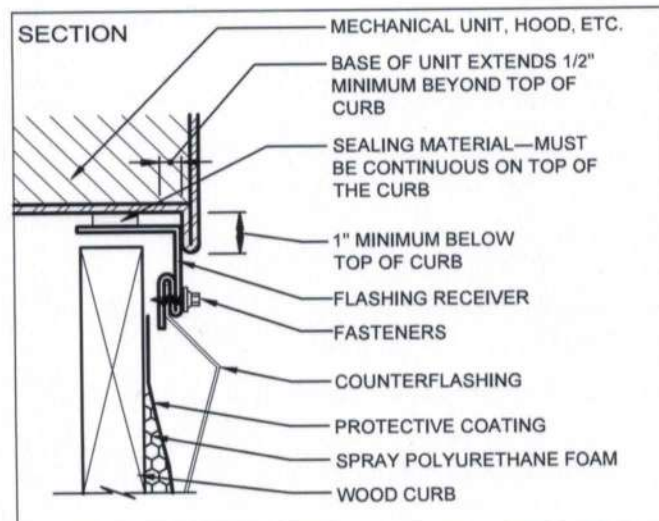
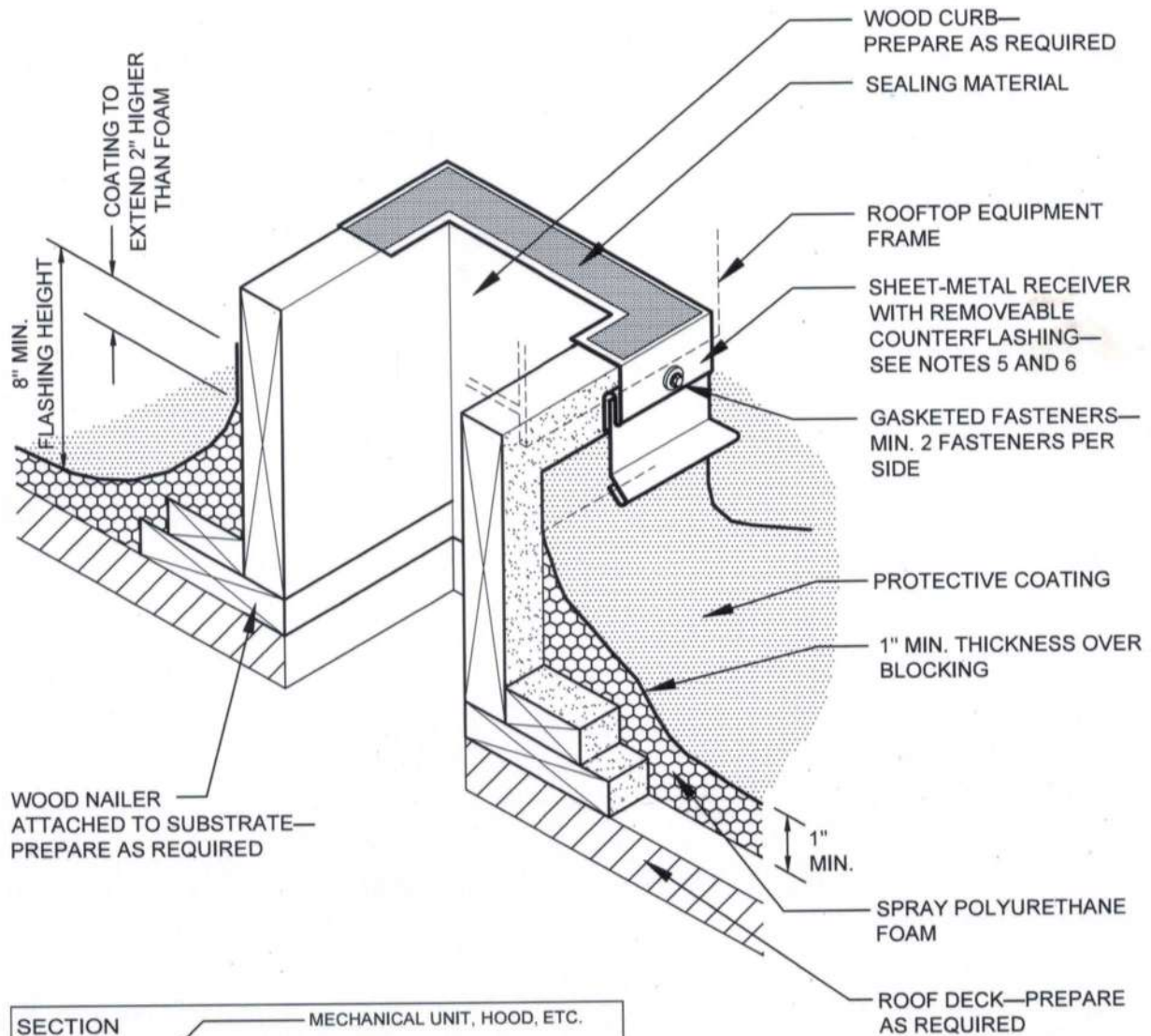


PERIMETER EDGE-METAL FLASHING WITH SEALANT [FOAM STOP]

2012

NOT DRAWN TO SCALE

SPF-2



NOTES:

1. THE CURBS, TOP WOOD NAILER AND SEAL STRIP ARE TO BE SUPPLIED BY THE CURB MANUFACTURER.
2. WHEN POSSIBLE, THE MECHANICAL UNITS SHOULD NOT BE SET UNTIL THE SPF ROOF SYSTEM HAS BEEN INSTALLED.
3. WHERE THE SKYLIGHT, SCUTTLE OR SMOKE-VENT FRAMES OVERLAP THE BASE FLASHING AT LEAST 3 INCHES, THE REMOVEABLE SHEET-METAL COUNTERFLASHING IS NOT REQUIRED.
4. NRCA RECOMMENDS DESIGNERS CONSIDER PERMANENT INTERNAL OR EXTERNAL FALL-PROTECTION DEVICES AT ALL SKYLIGHTS.
5. REFER TO THE ARCHITECTURAL METAL FLASHING SECTION OF THE NRCA ROOFING MANUAL: ARCHITECTURAL METAL FLASHING, CONDENSATION CONTROL AND REROOFING FOR DESIGN, JOINERY AND SECUREMENT OPTIONS FOR COUNTERFLASHINGS.
6. REFER TO THE INTRODUCTION IN CHAPTER 8— CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

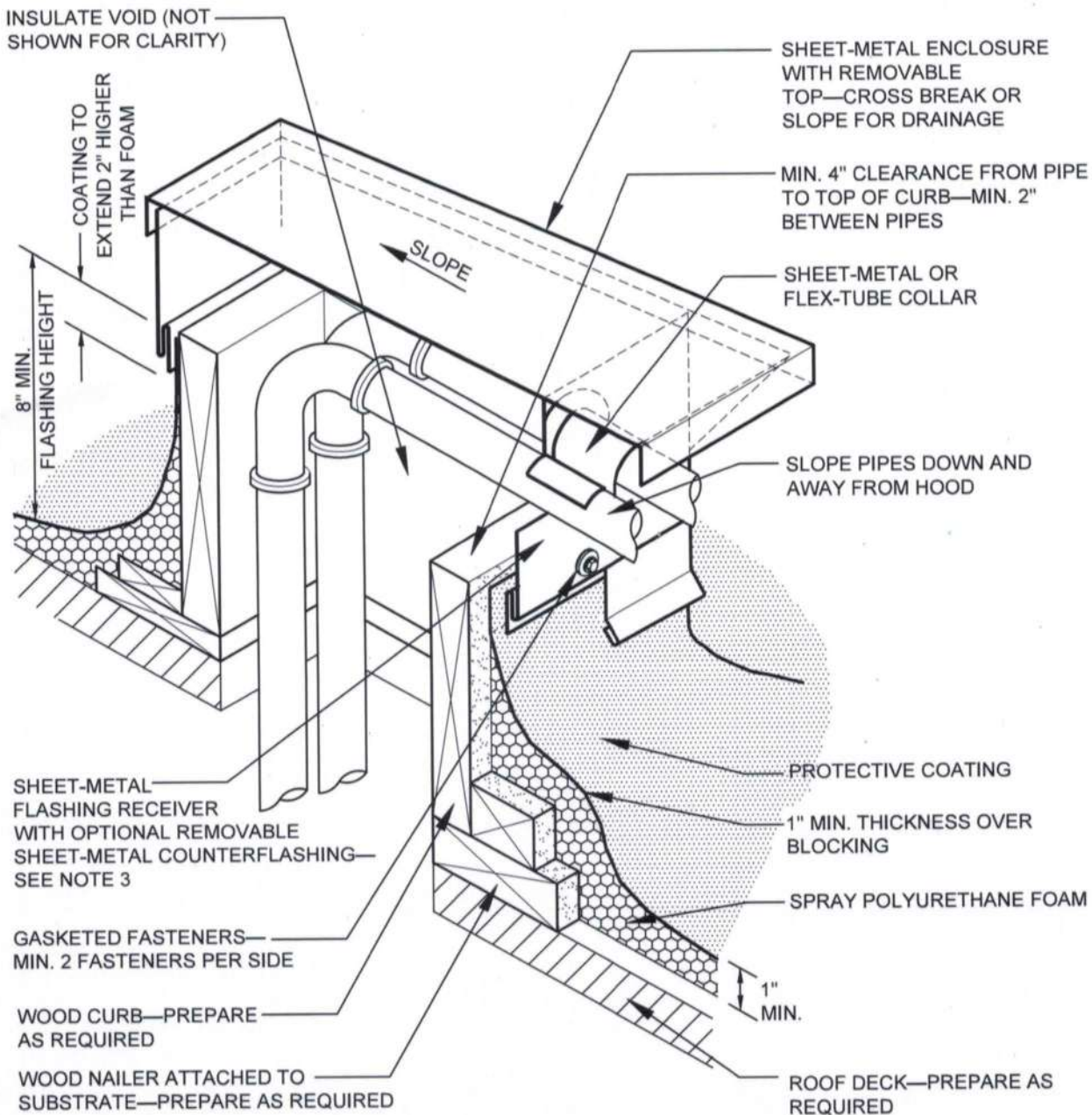


BASE FLASHING AT WOOD CURB

2012

NOT DRAWN TO SCALE

SPF-10



NOTES:

1. THIS DETAIL ILLUSTRATES ANOTHER METHOD OF ELIMINATING PITCH POCKETS AND GROUPING PIPING THAT MUST COME ABOVE THE ROOF SURFACE.
2. MANY MANUFACTURERS OFFER PREFABRICATED BOOTS AND OTHER MATERIALS FOR THIS PURPOSE. SPECIFICS ABOUT THESE PROPRIETARY DESIGNS VARY GREATLY, AND MANUFACTURERS' SPECIFICATIONS SHOULD BE CONSULTED FOR THEIR USE.
3. WHERE THE SHEET-METAL ENCLOSURE OVERLAPS THE BASE FLASHING AT LEAST 3 INCHES, THE REMOVABLE SHEET-METAL COUNTERFLASHING IS NOT REQUIRED.
4. REFER TO THE ARCHITECTURAL METAL FLASHING SECTION OF THE NRCA ROOFING MANUAL: ARCHITECTURAL METAL FLASHING, CONDENSATION CONTROL AND REROOFING FOR DESIGN, JOINERY AND SECUREMENT OPTIONS FOR COPINGS.
5. REFER TO THE INTRODUCTION IN CHAPTER 8—CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

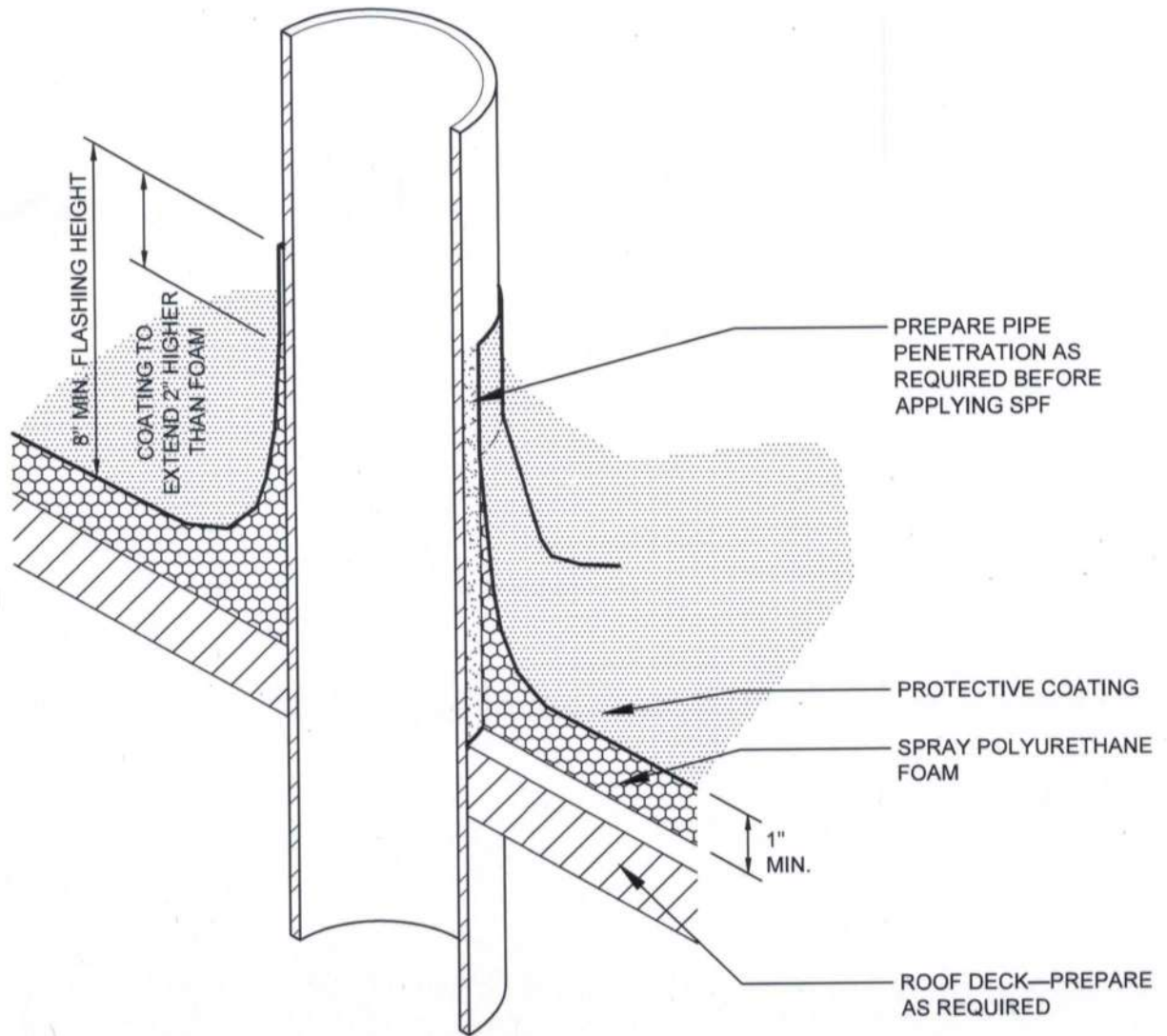


BASE FLASHING AT SHEET-METAL ENCLOSURE FOR PIPING THROUGH ROOF DECK

2012

NOT DRAWN TO SCALE

SPF-12



NOTES:

1. VENT STACKS AND OTHER PIPES SHOULD HAVE A MINIMUM 12 INCHES OF CLEARANCE ON ALL SIDES FROM WALLS, CURBS AND OTHER PROJECTIONS TO FACILITATE PROPER FLASHING.
2. REFER TO THE INTRODUCTION IN CHAPTER 8—CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

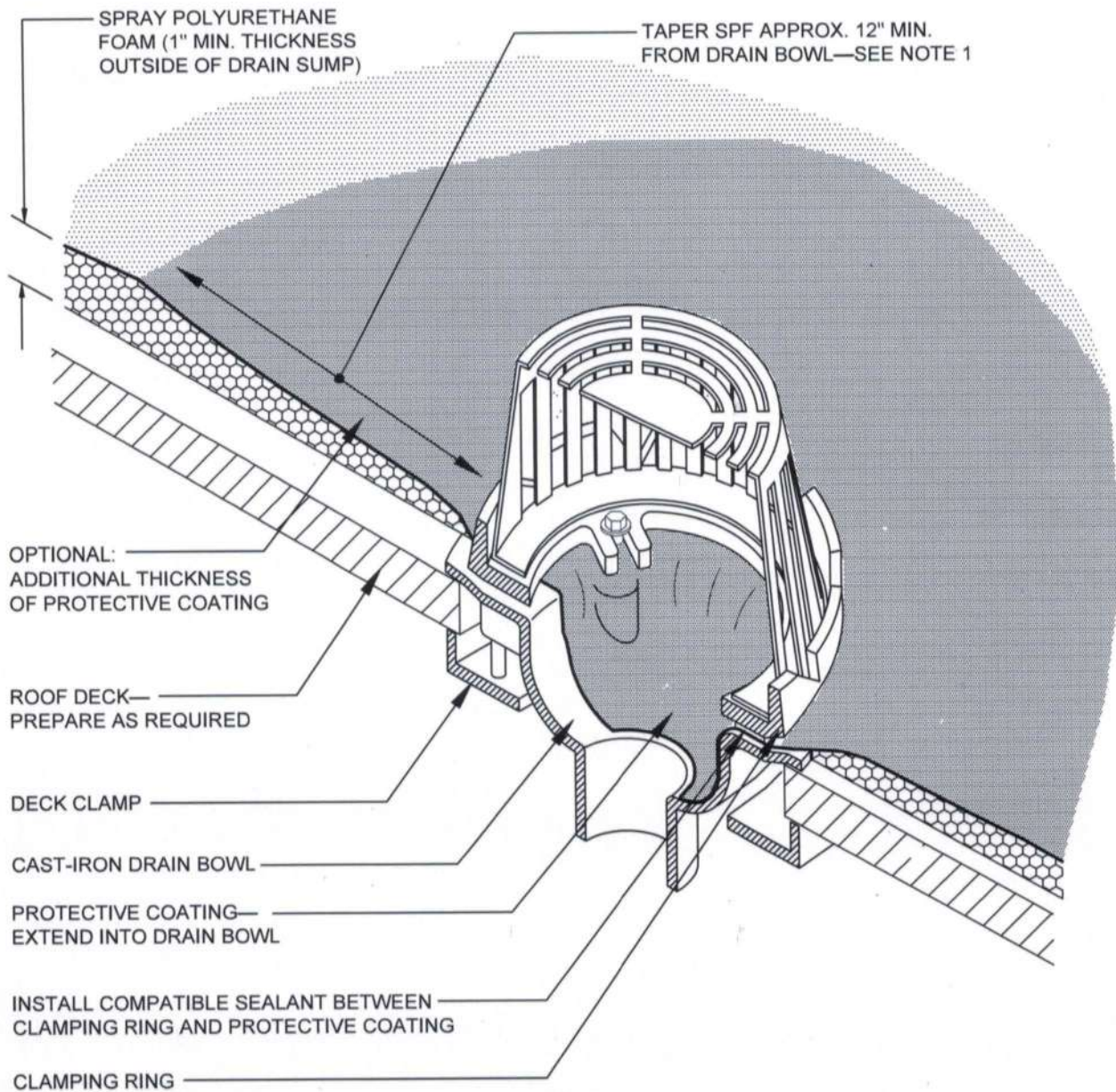


PIPE PENETRATION

2012

NOT DRAWN TO SCALE

SPF-15



NOTES:

1. TAPER SPF TOWARD DRAIN BOWL TO PROVIDE POSITIVE DRAINAGE.
2. THE USE OF A METAL DECK SUMP PAN IS NOT RECOMMENDED. HOWEVER, DRAIN RECEIVER/BEARING PLATES ARE APPLICABLE WITH SOME PROJECTS.
3. WHERE THE SPF IS TRIMMED OR GROUND FLUSH, ADDITIONAL COATING THICKNESS IS REQUIRED.
4. THE SPF AND COATING SHOULD NOT REDUCE THE DIAMETER OF THE DRAIN PIPE.
5. REFER TO THE INTRODUCTION IN CHAPTER 8—CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

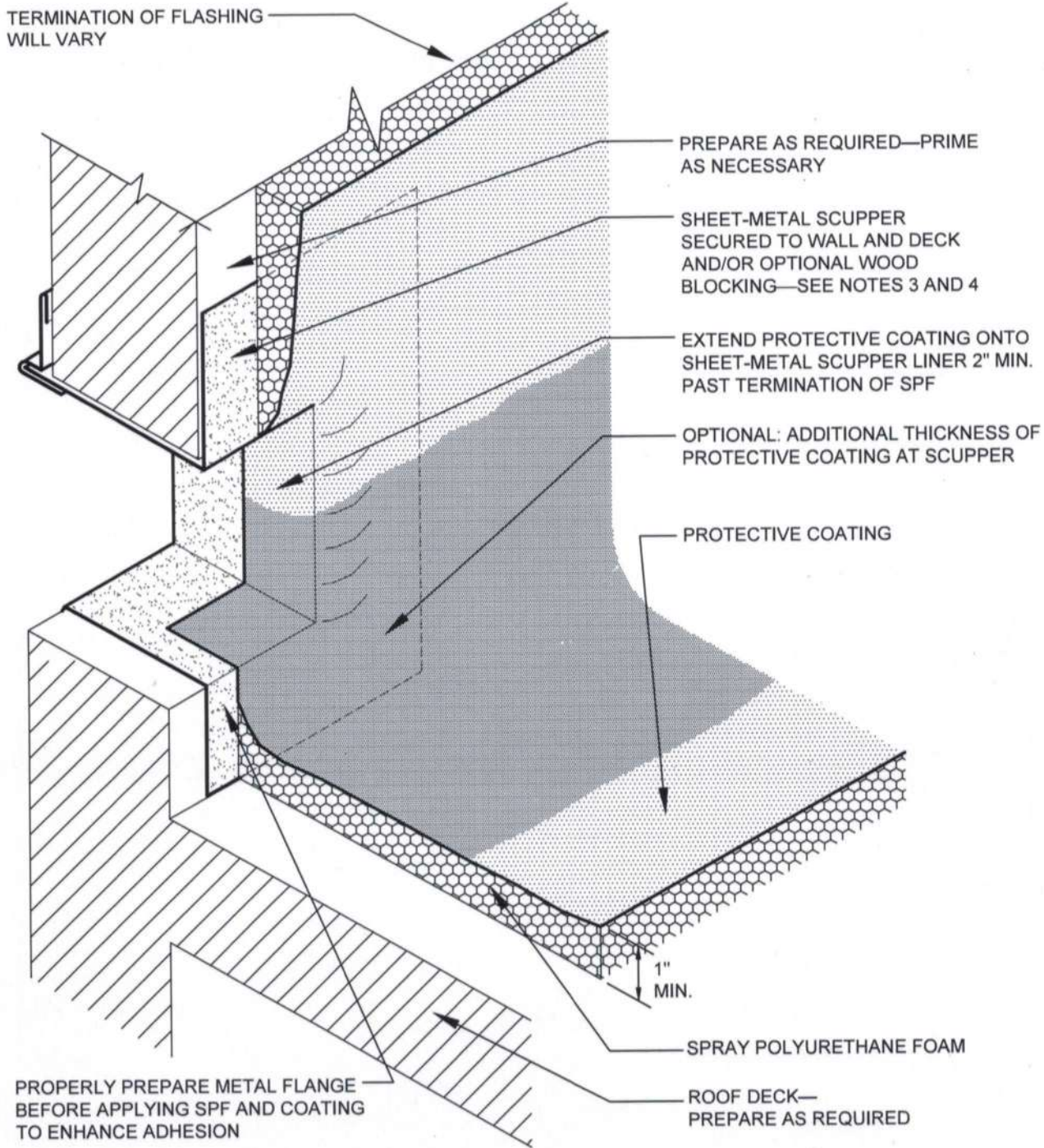


ROOF DRAIN

2011

NOT DRAWN TO SCALE

SPF-18



NOTES:

1. THIS DETAIL DOES NOT ALLOW FOR DIFFERENTIAL MOVEMENT BETWEEN THE DECK AND WALL.
2. ELEVATION OF SCUPPER MAY VARY.
3. REFER TO THE ARCHITECTURAL METAL FLASHING SECTION OF THE NRCA ROOFING MANUAL: ARCHITECTURAL METAL FLASHING, CONDENSATION CONTROL AND REROOFING FOR DESIGN, JOINERY AND SECUREMENT OPTIONS FOR SCUPPERS.
4. REFER TO THE INTRODUCTION IN CHAPTER 8—CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.

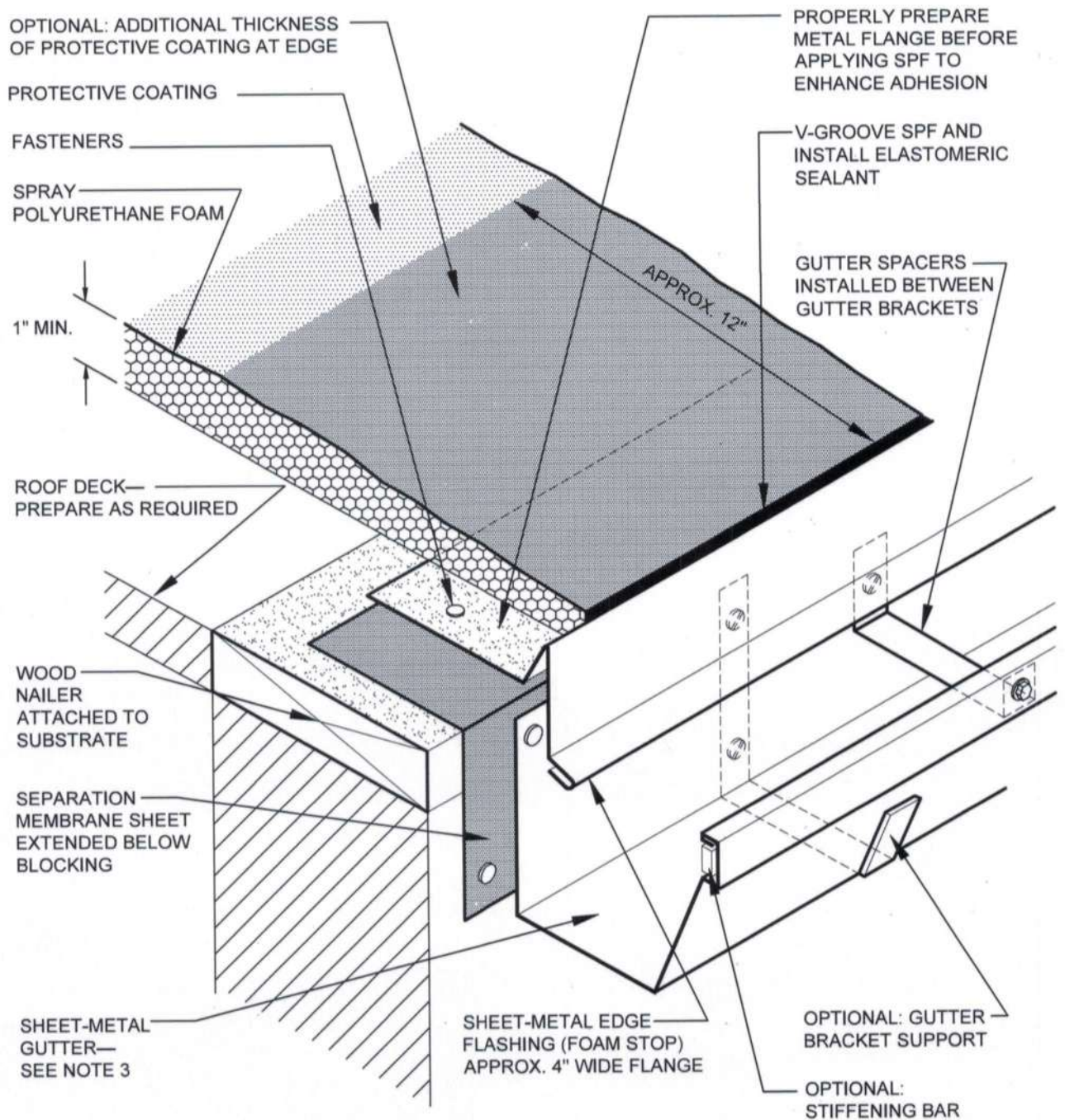


OVERFLOW SCUPPER

2012

NOT DRAWN TO SCALE

SPF-20



NOTES:

1. IN CLIMATES WHERE THE WINTER TEMPERATURE REMAINS BELOW FREEZING FOR EXTENDED PERIODS OF TIME, NRCA SUGGESTS USING INTERIOR DRAINS TO DRAIN THE ROOF.
2. REFER TO THE ARCHITECTURAL METAL FLASHING SECTION OF THE NRCA ROOFING MANUAL: ARCHITECTURAL METAL FLASHING, CONDENSATION CONTROL AND REROOFING FOR MORE INFORMATION ON GUTTERS.
3. REFER TO THE INTRODUCTION IN CHAPTER 8—CONSTRUCTION DETAILS FOR ADDITIONAL INFORMATION.



GUTTER WITH PERIMETER EDGE METAL

2012

NOT DRAWN TO SCALE

SPF-21



SWD URETHANE COATED FOAM ROOFING SYSTEM
MASTER ROOF SPECIFICATION
SECTION 075700

Part 1 GENERAL

SUMMARY

Section Includes: Coated foam roofing system and acceptable alternative applications as specified herein.

SYSTEM DESCRIPTION

- A. Roofing system shall be Class A over non-combustible deck. Roofing system shall be UL-790 (ASTM E-108) compliant and conform to 2006 or later UBC sections 1501-1510.
- B. System shall meet UL-1256 construction methods #136, #181 and #206. Roofing system shall meet TAS 114-D standard for wind uplift and UL-2218 standard impact resistance.
- C. Roofing system shall meet required ICC Revised AC-377 approval criteria, and/or, FM Global approval standards (if applicable), Energy Star and CRRC guidelines.
- D. Roofing system shall be Class B over combustible deck and conform to ASTM test standards, ICC and UBC requirements.
- E. Various warranty systems available depending on specification used. Contact manufacturer for details.

SUBMITTALS

- A. Product Data: Submit manufacturer's product data sheets, material specifications, installation instructions and evidence of (when applicable) UL, ICC, CRRC, Energy Star and/or FM ratings for roofing system.
- B. Provide specimen copy of the applicable warranty for this project, as specified herein.
- C. Submit evidence that coated foam roofing system is approved in accordance with UL-790 Class A Testing.
- D. Submit evidence that coated foam roofing system is approved in accordance with UL-2218 impact resistance testing.
- E. Submit evidence that coated foam roofing system is approved in accordance with UL Reports P-733, P-826 or P-904 for hourly fire resistance design ratings on specific decks, where applicable.
- F. Submit evidence that top coatings on coated foam roofing system are approved in accordance with Energy Star and/or CRRC standards for the pertinent jurisdiction requirements.

- G. LEED Submittals. If required, submit information from manufacturer regarding recycled content, manufacturing location and/or any other LEED required information.

RELATED SECTIONS

- A. Section 07590 – Membrane roof repairs
- B. Section 07620 – Sheet metal flashing and trim
- C. Section 07650 – Flexible flashing
- D. Section 07710 – Manufactured roof specialties
- E. Section 072736 - Sprayed foam air barrier
- F. Section 072000 – Thermal protection

QUALITY ASSURANCE

- A. Qualifications:
 - 1. Manufacturer: Company specializing in manufacturing roofing products, with minimum 20 years documented experience.
 - 2. Applicator: Roofing applicator with 5 years experience in work of similar scope and nature to that specified or approved by manufacturer of roofing material.
- B. Pre-Installation Conference:
 - 1. Convene a pre-installation conference to review roofing specifications, installation procedures and workflow with the architect, contractor, roofer and other trades relative to the work, prior to ordering materials.

DELIVERY, STORAGE AND HANDLING

- A. Delivery
 - 1. Deliver materials unopened and protected from freezing, excessive heat, direct sunlight and moisture to job site intact with proper labels as delivered by the manufacturer.
 - 2. Deliver so that stocks of materials on the site will permit uninterrupted progress of the work.
- B. Storage and Handling
 - 1. Adequately protect against damage, exposure to freezing, excessive heat, direct sunlight and moisture while stored at the job-site.
 - 2. Comply with manufacturer's storage instructions.

PROJECT & SITE CONDITIONS

- A. Do not install products under environmental conditions outside of manufacturer's specifications. Environmental condition (ambient and surface temperatures and humidity) logs should be maintained for compliance with manufacturer application and warranty criteria.

- B. Polyurethane foam shall not be sprayed during inclement weather and when the following conditions exist:
 - 1. If surface temperature is above 200° F or below 40° F or when the dew point is less than 5° F above the surface temperature.
 - 2. If surface moisture is present, or during rain, snow fog or mist.
 - 3. If wind velocity is above 12 miles per hour, windscreens are required; for wind velocity at or above 25 miles per hour, work shall be suspended.
- C. Do not apply silicone roof coatings when temperatures are below 40° F.
- D. Do not apply acrylic or cementitious roof coatings when temperatures are below 50° F or when there is a possibility of temperatures falling below freezing (32° F) within a 24 hour period.

WARRANTY

- A. Furnish SWD Urethane warranty on coated foam roofing system. Warranty shall cover repairs necessary to maintain roof system in a water-tight condition during the warranty period.
- B. Acceptable warranties:
 - 1. Material Limited Warranty
 - 2. System Limited Warranty
 - 3. NDL System Limited Warranty

END OF SECTION



Part 2 PRODUCTS

MANUFACTURERS

- A. Roofing products shall be manufactured by the following accepted manufacturer:
 - 1. SWD Urethane, 539 S Drew St, Mesa, Arizona 85210.
800-828-1394 Web site: www.swdurethane.com
- B. Substitutions: Not permitted.
- C. Requests for substitutions will be considered in accordance with provisions of Section 01600.

MATERIALS

- A. Polyurethane Foam
 - 1. Two component rigid foam, designed to be an insulation and waterproof seal over a substrate when properly applied with foam dispensing equipment, meeting the following minimum physical properties:

<u>Property</u>	<u>Procedures</u>	<u>Values</u>
Density, pcf nominal	ASTM D-1622	2.5
Compressive, psi	ASTM D-1621	40-50
Tensile, psi	ASTM D-1623	75
Shear, psi	ASTM C-273	51.9
Closed Cell Content %	ASTM D-2856	91
Permeance, perm/in	ASTM E-96	1 perm 1.4"
Wind Uplift	TAS 114-D	>250 psf
Noise Reduction Coefficient	ASTM C-423	.20
R Value	ASTM C-518	6.3

- 2. Polyurethane foam density and compressive strength shall be uniform and consistent with specification.
 - 3. Quik-Shield 125 polyurethane foam is acceptable.
- B. Acrylic Coating
 - 1. Acrylic coating system shall be single component coating uniquely formulated as a protective coating over spray polyurethane foam, modified bituminous, built-up, masonry, concrete, metal and single ply roofing membranes.
 - 2. Quik-Shield 1929 acrylic elastomeric coatings are acceptable.
 - 3. Acrylic coatings must meet the following minimum physical properties:

Property	Procedures	Quik-Shield 1929F Values
Solids Content:		
By Weight	ASTM D-1353	70+5%
By Volume	ASTM D-2697	60+5%
Solar Reflectance	ASTM E-903	82%
Solar Reflectance Index	ASTM E-1980	103%
Thermal Emittance	ASTM E-408	91%
Tensile Strength:		
psi @75°	ASTM D-412	280
Elongation at break: psi @75°	ASTM D-412	355
Water Absorption	ASTM D-2842	5%
Permeance: perms @ 20 mils	ASTM E-96	3.5
Hardness: Shore A	ASTM D-2240	60

C. Silicone Coating

1. Silicone coating system shall be single component silicone coating designed as a weather seal coating over spray polyurethane foam roof systems.
2. Silicone coating system shall be high solids silicone coating designed to provide a weather seal coating for vertical walls, masonry, concrete, metal, single ply membranes and spray polyurethane foam roof systems.
3. SWD Urethane Quik-Shield 2110 and 2120 are acceptable.
4. Silicone coatings must meet the following minimum physical properties:

Property	Procedures	Quik-Shield	Quik-Shield
		2110 Values	2120 Values
Solids Content:			
By Weight	ASTM D-1644	80±2%	96±2%
By Volume	ASTM D-2697	69±2%	96±2%
Solar Reflectance	ASTM C-1549	85%	87%
Solar Reflectance Index	ASTM E-1980	105%	110%
Thermal Emittance	ASTM C-1371	85%	89%
Tensile Strength: psi @73°	ASTM D-412	486	331
Elongation: psi @73°	ASTM D-412	267%	192%
Water Absorption	ASTM D-2842	0.1%	0.1%
Permeance: @ 20 mils	ASTM E-96	5.9	5.9
Hardness: Shore A	ASTM D-2240	50±5	50±5

D. Cementitious Coating

1. Cementitious coating system shall be acrylic coating topped with cementitious roof coating designed as a protective, renewable coating over spray polyurethane foam, modified bituminous, metal and single ply roofing membranes.
2. Quik-Shield 2313 is an acceptable product.
3. Cementitious coating system must meet the following physical properties:

<u>Property</u>	<u>Procedures</u>	Quik-Shield 2313 <u>Values</u>
Solar Reflectance	ASTM E-903	81%
Solar Reflectance Index	ASTM E-1980	101%
Thermal Emittance	ASTM E-408	87%
UV Resistance	ASTM E-822	2000 hr – no effect
High temp stability	ASTM D- 794	No effect

E. Granules

1. Granules may be used within any of the coating systems as a non-slip additive or to increase the performance of the coating system.
2. Numbers 6, 9 or 11 screen sized limestone or ceramic coated granules are acceptable.
3. Ceramic coated granules must be completely encapsulated or “locked in” by coating.

F. Primer

1. Primer designed to enhance adhesion of polyurethane foam to various surfaces, as required by manufacturer.
2. SWD Quik-Shield 1000 or SWD Quik-Shield 2000 Primer is acceptable.

G. Accessories

1. Acceptable roofing accessories, including flashing, preformed pipe vent boots, fasteners and other roofing accessory materials should be reviewed and approved by the roof system manufacturer to ensure compliance with warranty terms.

END OF SECTION



Part 3 EXECUTION

EXAMINATION

- A. Verification of Conditions:
 - 1. Roofing contractor shall examine the roof deck, flashings and other surfaces that are to receive roofing materials prior to application to ensure that surfaces are dry and free of dust, dirt, debris, oil, solvents and other materials that may adversely affect the adhesion of the polyurethane foam.
 - 2. All penetrations through the roof, including drains, scuppers, miscellaneous pipe and vent penetrations and electrical conduits, shall be completed prior to starting of work.
- B. Application of roofing material shall constitute the roofing contractor's acceptance of surfaces and flashings to receive the materials.
- C. Coordinate with other work, which affects, connects with or will be concealed by this work.

PREPARATION

- A. New Construction
 - 1. General Area:
 - a. Clean surfaces thoroughly prior to installation of the roofing system.
 - b. Prepare the substrates and surfaces using manufacturer recommended methods for best result product performance.
 - c. Mask work area as necessary to protect from possible overspray. Mask building surfaces to terminate the foam and coating in a neat, straight line.
 - d. Use appropriate barricading methods to shelter walking traffic from the work area's equipment and overspray.
 - e. Follow appropriate industry safety requirements
 - i) Provide adequate ventilation for all areas being worked.
 - ii) Provide fire extinguishers at the job site at all times.
 - f. Finished surfaces are not to be installed before the polyurethane foam is to be applied.
 - 2. Surface Preparation for New Construction Roof Decks
 - a. Wood Deck
 - i) Deck shall be dry and free of dirt, dust, grease, oil and any other contaminants that may affect proper foam adhesion to the substrate.

- ii) Remove loose dirt by use of compressed air, vacuum, hand or power broom. No washing is permitted.
- iii) Remove grease, oil or other contaminants by use of proper chemical solvents.
- iv) Plywood joints in excess of ¼" shall be taped or filled with a suitable sealant material, prior to application of polyurethane foam.
- v) Tongue & groove sheathing or planking: Overlay may be necessary if existing deck is damaged. Overlay should be minimum ¼" thick exterior grade plywood or other suitable covering.
- vi) Prime the wood deck with Quik-Shield 1000 or 2000 at the rate of ½ gallon per 100 square feet if needed or required by manufacturer.

b. Concrete Deck

- i) Remove loose dirt, dust and debris by using compressed air, vacuum equipment or a broom. Oil and grease or other contaminants shall be removed with proper cleaning solutions.
- ii) Concrete decks shall be minimum 2,500 psi compressive strength structural concrete that has been cured a minimum of 28 days. Concrete may be either pre-cast or poured in-place.
- iii) All joint openings in concrete decks that exceed ¼" shall be grouted or caulked prior to application of polyurethane foam.
- iv) Concrete surface should be smooth and dense with a firm hard surface. Loose granular finishes are not acceptable.
- v) Priming is required on concrete surfaces. Prime the wood deck with Quik-Shield 1000 or 2000 at the rate of ½ gallon per 100 square feet.

c. Metal Deck

- i) The metal roof deck shall be constructed of minimum 22-gauge steel. Construction shall conform to local building codes.
- ii) Metal surfaces shall be free of all rust, scale, dirt, grease, oil, chalking, paint or other contaminants.
- iii) Clean metal deck free of loose scale, rust, or chalking paint using compressed air-jet, vacuum equipment, hand or power-broom. Grease, oil or other contaminants shall be removed with proper cleaning solutions.
- iv) Fluted metal decks require a suitable method of covering or filling the flute prior to polyurethane foam application. Flutes may be covered with a suitable board stock, tape, or filled with spray-applied polyurethane foam.

- v) Metal flutes up to three (3) inches in width, may be taped with 4" construction grade adhesive tape, then sprayed with a minimum of 1 ½" of foam.
 - vi) Priming is required on metal surfaces. Prime the metal deck with Quik-Shield 1000 or 2000 at the rate of ½ gallon per 100 square feet.
- d. Other Surfaces (i.e. Cement Fiber Board, Gypsum Board, Isocyanurate Board, etc.)
- i) Materials installed over metal decks must be installed with mechanical fasteners or adhesives required to meet the local building codes.
 - ii) Fasteners shall be installed to meet Factory Mutual wind uplift criteria or the appropriate local building code criteria.
 - iii) Boards shall be staggered and firmly butted together along edges without gaps or openings. Joints exceeding ¼" shall be caulked with a suitable sealant material.
 - iv) Protect mineral, cement or gypsum board from getting wet in storage on the job-site and after installation, prior to being protected by foam. Wet or moist materials shall be replaced prior to application of foam.
 - v) Protect installed materials from spills of contaminants such as oil, grease and solvents prior to application of the foam. Contaminated materials shall be replaced prior to application of foam.
 - vi) Remove loose dirt and debris by using compressed air, vacuum or broom. No power-broom is permitted due to possibility of damage.
 - vii) Surfaces may require priming. See manufacturer recommendations for a primer suitable for use with the assembly.

B. Retro Fit

1. General Area:

- a. Thoroughly inspect the entire existing roof. Cut out and remove any wet substrate. Inspect any masonry or other surfaces for structural soundness.
- b. Power wash, power broom and vacuum or otherwise remove all loose gravel, dirt, dust, oil, solvents, grease, or anything else that may interfere with the adhesion between the polyurethane foam and the substrate.
- c. Remove and replace any wood nailers or other structural members that have lost their integrity.
- d. Insure the existing roof deck is properly cleaned, dried and primed prior to applying foam and coating.

- e. Verify that existing edge metal is properly and securely attached to a sound substrate.
- f. Remove, or mechanically fasten all loose, slumping or otherwise deteriorated wall and penetration flashings with appropriate fasteners and plates.
- g. Remove, raise or otherwise modify as required by code or as is necessary all existing roof installed equipment to allow for proper installation of the roof system.
- h. Mask, cover or otherwise protect all immovable objects and air intakes within the spray area.
- i. Ensure all roof drains and scuppers are at the correct elevation to match the specified height of the installed foam roof system for proper roof drainage.
- j. Verify that all roof drains and pipes are free of debris and properly drain prior to installing the new roof system.
- k. Mark existing low areas where ponding water occurs and areas of poor drainage. Ponding water is defined as "the excessive accumulation of water at low-lying areas on a roof that remains after 48 hours after precipitation under conditions conducive to drying". Correct these areas during roof system installation by the sufficient thickness of foam to level these areas.
- l. Mask work area as necessary to protect from possible overspray. Mask building surfaces and existing rooftop equipment to terminate the foam and coating in a neat, straight line.
- m. Do not allow fumes or dust from the foam and coating applications to enter the building.
- n. Turn off HVAC equipment and cover all intake vents and other potential sources of air entry into the building.

2. Existing Built-up Roof.

- a. All loose gravel, dust and residue shall be removed using power vacuum equipment, power sweeper, air blowing or other suitable means.
- b. Exercise care in removing of gravel so that the top layer of roofing felts is not damaged. Do not allow large amounts of gravel to accumulate in one area of the roof such that the roof deck structure exceeds its weight rating.
- c. The existing roof shall be thoroughly inspected for adhesion between felts, insulation and deck. Areas of poor adhesion should be secured with fasteners.
- d. Blisters, buckles, ridges, punctures, wrinkles and fish-mouths shall be cut out and/or secured with fasteners and repaired in an industry acceptable manner.

- e. Repair membrane splits by cleaning an area 6 inches wide on both sides of the split and mechanically attaching the membrane on each side of the split.
 - f. Remove or re-fasten all loose base flashing, counter-flashing and gravel-stops, as required by manufacturer's recommendations.
 - g. Examine substrate thoroughly for moisture. Wet or moist substrate shall be cut out, deck properly cleaned, dried and primed prior to applying the foam roof system.
 - h. If needed, prime the existing asphaltic substrates with Quik-Shield 1000 or 2000 at the rate of ½ gallon per 100 square feet as needed or required by manufacturer.
3. Existing Fully Adhered Single Ply Roof
- a. All loose gravel, dust and residue shall be removed using power vacuum equipment, power sweeper, air blowing or other suitable means.
 - b. Blisters, buckles, ridges, punctures, wrinkles and fish-mouths shall be cut out and/or secured with fasteners and repaired in an industry acceptable manner.
 - c. Repair membrane splits by cleaning an area 6 inches wide on both sides of the split and mechanically attaching the membrane on each side of the split.
 - d. Remove or re-fasten all loose base flashing, counter-flashing and gravel-stops, as required by manufacturer's recommendations.
 - e. Examine substrate thoroughly for moisture. Wet or moist substrate shall be cut out, deck properly cleaned, dried and primed prior to applying the foam roof system.
 - f. Surface must be clean, sound, dry and free of any materials that would inhibit proper adhesion of the primer.
 - g. Membranes must be primed with a primer suitable for use with the polyurethane foam.
 - h. EPDM roofs require manufacturer input for proper surface preparation details.
4. Existing Ballasted or Mechanically Fastened Single Ply Roof
- a. Existing ballasted roofs must be removed or recovery board installed over the roof after the ballast has been removed. Recovery board must be installed according to manufacturer's recommendations for applicable wind uplift requirements.
 - b. Mechanically fastened roofs must have additional fasteners with 4 to 6 inch plates and perimeter attachment as follows:
 - i) Remove 18 inches of membrane around the perimeter.
 - ii) Fasten the severed edge to the deck with fasteners every 6 inches. Alternatively fasten the edge to the deck with 6 inch wide 22 gage metal batons.

- iii) Prime exposed roof deck with a suitable primer.
- iv) Fasten the field of the roof surface with a minimum of 1 fastener every 18 inches.
- v) Clean fasteners and batons and prime with a metal primer.
- c. Blisters, buckles, ridges, punctures, wrinkles and fish-mouths shall be cut out and/or secured with fasteners and repaired in an industry acceptable manner.
- d. Repair membrane splits by cleaning an area 6 inches wide on both sides of the split and mechanically attaching the membrane on each side of the split.
- e. Remove or re-fasten all loose base flashing, counter-flashing and gravel-stops, as required by manufacturer's recommendations.
- f. Examine substrate thoroughly for moisture. Wet or moist substrate shall be cut out, deck properly cleaned, dried and primed prior to applying the foam roof system.
- g. Surface must be clean, sound, dry and free of any materials that would inhibit proper adhesion of the primer.
- h. Membranes must be primed with a primer suitable for use with the polyurethane foam.

PRIMER APPLICATION

- A. Application of primer shall be per manufacturer's recommendations and need not be applied on all substrates.
- B. All surfaces should be clean and free from moisture, oil, grease, loose particles, dust, debris and any other materials that prevent proper adhesion.
- C. Spray primer to decking at a rate of ½ gallon per 100 square feet.

POLYURETHANE FOAM APPLICATION

- A. Apply polyurethane foam in strict accordance with the manufacturer's specifications and application instructions.
- B. Foam shall be applied in minimum ½" thick passes and maximum 1½" thick passes to achieve the specified thickness, except where tapering is required to facilitate proper roof drainage.
- C. Apply the polyurethane foam to the full specified thickness in any area on the same day.
- D. Apply the foam to ensure proper roof drainage, resulting in no ponding water. Ponding water is defined as "the excessive accumulation of water at low-lying areas on a roof that remains after 48 hours after precipitation under conditions conducive to drying". Correct these areas during roof system installation by the sufficient thickness of foam to level these areas.
- E. Terminate polyurethane foam neatly a minimum of 4 inches above the finished roof surface at roof penetrations. Foamed-in-place cants shall be applied to allow a smooth transition from the horizontal to vertical surface and shall be applied prior to the application of additional foam lifts to achieve specified

thickness. Mask building surfaces to terminate the foam and coating in a neat, straight line.

- F. Finished polyurethane foam surface shall range from a smooth to heavy "orange peel" finish. Textures described as "popcorn" or "tree bark" surfaces, which exhibit crevices, voids and widespread defects, are not acceptable, and must be removed and reapplied prior to coating application.

ACRYLIC ROOF COATING APPLICATION

A. Preparation

1. Foam surface and adjacent surfaces to be coated shall be clean and completely free of degraded foam, grease, oil or other contaminants which would interfere with proper coating adhesion.
2. Surface shall be dry and frost-free before coating. Do not apply coating materials when surface temperature is less than 50 degrees F.
3. Any physical damage to the polyurethane foam shall be repaired before coating.
4. Operator should wear soft-soled shoes to avoid damaging the skin of the foam.
5. An additional application of base coat shall be applied where foam surface has been sanded, planed or trimmed and the skin removed prior to applying normal base coat to the entire area.
6. The polyurethane foam shall be inspected for suitability of base coat application, prior to application of the protective coating and be free of UV oxidation and contaminants.

B. Base Coat

1. Use a contrasting color from the top coat to insure adequate coverage.
2. Apply acrylic coating on the same day as the polyurethane foam application, and after the polyurethane foam has been allowed to cure for at least one hour. If the base coat is not applied within 24 hours of the foam, remove and repair all signs of oxidation, or other damages as required by manufacturer.
3. Allow each coat to cure a minimum of 12 hours before proceeding with successive coats. Second and successive coats should be applied within 48 hours to ensure good adhesion.
4. Spray-apply base coat over spray foam roofing at a rate of 1 to 2 gallons per 100 square feet in one application, depending on ambient conditions.
5. Edges of the roof shall be pre-coated in a picture frame fashion so as to have at least one additional coat on the edges relative to the field of the roof.

C. Top Coat

1. Coating shall be a contrasting color from the base coat to ensure adequate coverage.

2. Do not apply top coat until base coat has fully cured. If it has been more than 48 hours since base coat application, the base coated roof should be power washed and any surface imperfections fixed prior to application of the top coat.
3. Spray-apply elastomeric top coat over the base coat at the rate of 1-2 gallons per 100 square feet in one application, depending on ambient conditions.
4. All foam is to be coated. Coating shall extend up and over all polyurethane foam on vent pipes, parapets and other penetrations and shall terminate a minimum of 2 inches above the foam. All top coat termination points shall be straight-lined on walls, parapets, vent pipes and other penetrations.
5. Apply the topcoat at right angles to the preceding coat. Surface texture and conditions may require additional quantities of coating to ensure proper millage. In areas where the foam has been cut or channeled or where the perimeter edges have been ground, apply additional coating to assure the open cells in the foam have been completely sealed.

D. Granules

1. Granules, when specified, shall be broadcast into wet top coat while it is being applied at the minimum rate of 30 pounds per 100 square feet.
2. Shall consist of numbers 6, 9 or 11 limestone or ceramic coated granules.
3. Ceramic coated granules must be completely encapsulated or "locked in" by coating.

SILICONE ROOF COATING APPLICATION

A. Preparation

1. Foam surface and adjacent surfaces to be coated shall be clean and completely free of degraded foam, grease, oil or other contaminants which would interfere with proper coating adhesion.
2. Surface shall be dry and frost-free before coating. Do not apply coating materials when surface temperature is less than 50 degrees F.
3. Any physical damage to the polyurethane foam shall be repaired before coating.
4. Operator should wear soft-soled shoes to avoid damaging the skin of the foam.
5. An additional application of base coat shall be applied where foam surface has been sanded, planed or trimmed and the skin removed prior to applying normal base coat to the entire area.
6. The polyurethane foam shall be inspected for suitability of base coat application, prior to application of the protective coating and be free of UV oxidation and contaminants.

A. Base Coat

1. Apply coating in accordance with the manufacturer's application instructions and precautions listed in the product data sheet. Silicone coating may be applied via spray, roller or brush.
2. Apply silicone base coat on the same day as the polyurethane foam application, and after the polyurethane foam has been allowed to cure a minimum of one hour. If the basecoat is not applied within 24 hours of the foam application, remove and repair all signs of oxidation, UV degradation or other damages as required by manufacturer.
3. Patch holes less than 3 inches in diameter with silicone sealant. Holes larger than 3 inches require additional spray foam to match the adjacent surfaces prior to applying the silicone coating.
4. Apply the basecoat in a uniform application to achieve a finished dry film thickness of approximately 12-15 mils.
5. Basecoat shall not be subjected to foot traffic or otherwise disturbed until it is tack-free.
6. Coating shall not be applied to the exposed leading edge of the foam at unfinished areas. Sandwiching of coating between foam passes is not permitted.
7. After the basecoat has cured, inspect the coating for pinholes, cracks, thin areas or other deviations. All deviations observed shall be caulked with sealant and/or roller coated with additional basecoat prior to applying subsequent coats of silicone.
8. Basecoat must be cured, clean and free of all moisture prior to application of intermediate coat and topcoat. Basecoat and topcoat should be contrasting colors to ensure adequate thickness and coverage.
9. Apply the intermediate coat at right angles to the basecoat application.

B. Top Coat

1. Apply the topcoat at right angles to the preceding coat. Surface texture and conditions may require additional quantities of silicone to ensure proper millage. In areas where the foam has been cut or channeled or where the perimeter edges have been ground, apply additional coating to assure the open cells in the foam have been completely sealed. Silicone coating may be applied to the exterior of vent coverings. Vent coverings shall be properly prepared as with any other substrate as outlined in this guide specification.
2. Coating shall be applied a minimum of 2 inches beyond all the terminated edges of the polyurethane foam. Mask terminations to provide as straight edge and neat, finished appearance.
3. After curing, inspect the finished coating surface for pinholes, cracks, thin areas or other deviations. Repair any deviations with silicone sealant or additional silicone coating material.
4. Set the strainer dome in dabs of silicone sealant.

C. Granule Application

1. Apply roofing granules immediately (within 3 minutes) after application of the finish coat of silicone coating. Immediate application is important to obtain maximum wet-out and embedment.
2. Apply the roofing granules uniformly at a rate of approximately 40 lbs per 100 square feet of roof area.
3. Remove all loose granules using a soft-bristled broom after the coating has fully cured to prevent blocking gutters and clogging drains.
4. Bare spots in the granulated surface shall be filled in by applying additional coating and granules in these areas.

CEMENTITIOUS ROOF COATING APPLICATION

A. Preparation

1. Foam surface and adjacent surfaces to be coated shall be clean and completely free of degraded foam, grease, oil or other contaminants which would interfere with proper coating adhesion.
2. Surface shall be dry and frost-free before coating. Do not apply coating materials when surface temperature is less than 50 degrees F.
3. Any physical damage to the polyurethane foam shall be repaired before coating.
4. Operator should wear soft-soled shoes to avoid damaging the skin of the foam.
5. An additional application of base coat shall be applied where foam surface has been sanded, planed or trimmed and the skin removed prior to applying normal base coat to the entire area.
6. The polyurethane foam shall be inspected for suitability of base coat application, prior to application of the protective coating and be free of UV oxidation and contaminants.

B. Acrylic Base Coat

1. Use a contrasting color from the top coat to insure adequate coverage.
2. Apply acrylic coating on the same day as the polyurethane foam application, and after the polyurethane foam has been allowed to cure for at least one hour. If the base coat is not applied within 24 hours of the foam, remove and repair all signs of oxidation, or other damages as required by manufacturer.
3. Allow each coat to cure a minimum of 12 hours before proceeding with successive coats. Second and successive coats should be applied within 48 hours to ensure good adhesion. If more than 48 hours have passed since base coat application, the base coated roof should be power washed and any surface imperfections fixed prior to application of intermediate coats.

4. Apply additional coats at right angles to the preceding coat. Surface texture and conditions may require additional quantities of coating to ensure proper millage. In areas where the foam has been cut or channeled or where the perimeter edges have been ground, apply additional coating to assure the open cells in the foam have been completely sealed.
5. Spray-apply base coat over insulation at a rate of 1 to 2 gallons per 100 square feet in one application, depending on ambient conditions.
6. Edges of the roof shall be precoated in a picture frame fashion so as to have at least one additional coat on the edges relative to the field of the roof.

C. Cementitious Top Coat

1. Spray-apply cementitious top coat over the acrylic coating at the rate of 1/8 inch to 1/4 inch per 100 square feet in one application, depending on ambient conditions.
2. All foam is to be coated. Coating shall extend up and over all polyurethane foam on vent pipes, parapets and other penetrations and shall terminate a minimum of 2 inches above the foam. Vertical surfaces must be top coated with the acrylic coating to achieve the proper millage as the cementitious is an approved top coat for low slope roof portions only. All top coat termination points shall be straight-lined on walls, parapets, vent pipes and other penetrations.

D. Granules

1. Granules, when specified, shall be broadcast into wet top coat while it is being applied at the minimum rate of 65 pounds per 100 square feet.
2. Shall consist of number 6 limestone granules.

CLEANING

- A. Remove and dispose of excess materials, equipment and debris from premises during work and/or upon completion of work.
- B. Leave work in clean condition in accordance with general condition requirements.

FIELD QUALITY CONTROL

- A. Roof system manufacturer shall provide an independent inspection firm to perform periodic inspections of and on the roof as required by the warranty inspection program.
- B. Any areas that do not meet the minimum required standards for application as specified herein, or as the warranty terms require, shall be corrected by the applicator. Manufacturer's inspection or verification shall not constitute acceptance of responsibility for any improper application of material.

PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products.

END OF SECTION



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Reissued 11/2017
This report is subject to renewal 11/2018.

DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION
SECTION: 07 57 00—COATED FOAM ROOFING

REPORT HOLDER:

SWD URETHANE

**540 SOUTH DREW STREET
MESA, ARIZONA 85210**

EVALUATION SUBJECT:

SWD URETHANE SWD QUIK-SHIELD® | 125 COATED FOAM ROOFING SYSTEM



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DIVISION: 07 00 00—THERMAL AND MOISTURE PROTECTION

Section: 07 57 00—Coated Foam Roofing

REPORT HOLDER:

SWD URETHANE
540 SOUTH DREW STREET
MESA, ARIZONA 85210
(800) 828-1394
www.swdurethane.com

EVALUATION SUBJECT:

SWD URETHANE SWD QUIK-SHIELD® | 125 COATED FOAM ROOFING SYSTEM

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2012, 2009 and 2006 *International Building Code*® (IBC)
- 2012, 2009 and 2006 *International Residential Code*® (IRC)

Properties evaluated:

- Physical properties
- Fire classification
- Wind resistance

2.0 USES

The SWD Urethane coated foam roofing systems described in this report are used in the construction of Class A and Class B roof coverings, as noted in Table 1. The roof covering systems may be used on buildings of any type of construction.

3.0 DESCRIPTION

3.1 General:

The coated foam plastic roof covering systems described in this report consist of SWD Quik-Shield® | 125 foam plastic insulation, SWD Quik-Shield® | 1929F coating, surfacing, as described in Section 4.4.4, and (when required) primer.

3.2 SWD Quik-Shield® | 125:

SWD Quik-Shield® | 125 is a two-component, spray-applied, polyurethane foam plastic insulation. The insulation is produced in the field by combining Component A with resin Component B, resulting in insulation with a nominal density range of 2.5 to 3.0 pcf (40 to 48 kg/m³). The insulation components are supplied in 55-gallon (208 L) drums and 2,500 pound (1125 kg) totes, and have

a shelf life of six months when stored in unopened containers at temperatures between 50°F (10°C) and 100°F (37.7°C).

The foam plastic insulation has a flame spread index of 25 or less for densities up to 2.7 pcf (43 kg/m³) and 75 or less for densities up to 3.0 pcf (48 kg/m³) when tested in accordance with ASTM E 84 at a maximum thickness of 4 inches (102 mm).

3.3 SWD Quik-Shield® | 1929F:

SWD Quik-Shield® | 1929F is a water-based, acrylic, elastomeric coating complying with ASTM D 6083, used over SWD Quik-Shield® | 125 foam plastic insulation. The coating is available in 5-gallon and 55-gallon (18.9 L and 208 L) containers, and has a shelf life of six months when stored in unopened containers at temperatures between 50°F and 100°F (10°C and 37.7°C).

3.4 SWD Quik-Shield® | Cementitious Roof Mix:

SWD Quik-Shield® | Cementitious Roof Mix is a dry cementitious mix used in producing the field-mixed surfacing described in Section 4.4.4. The dry mix is supplied in 40-pound (18 kg) packages, and has a one-year shelf life when stored in a dry location in unopened packages, at temperatures between 50°F to 100°F (10°C to 37.7°C).

3.5 SWD Quik-Shield® | 1000 and SWD Quik-Shield® | 2000 Primers:

SWD Quik-Shield® | 1000 and SWD Quik-Shield® | 2000 are neoprene-based primers for use over plywood, concrete or steel substrates. The primer is available in 5-gallon and 55-gallon (18.9 L and 208 L) containers, and has a shelf-life of six-months when stored in unopened containers at temperatures between 50°F and 100°F (10°C and 37.7°C).

3.6 Impact Resistance:

The coated foam roofing systems described in this report comply with the Resistance to Foot Traffic Test in Section 5.5 of FM 4470, as referenced in IBC Section 1504.7.

3.7 Thermal Transmission (R-values):

The insulation has thermal resistance (R-value) of 6.3 ft²hrF/Btu (1.11 k·m²/W), for a 1-inch (25.4 mm) thickness at a mean temperature of 75°F (24°C).

4.0 INSTALLATION

4.1 Preparation of Substrates:

The substrates to be covered must be free of grease, oil, loose particles, moisture or any other substances that might interfere with the bond between the foam plastic and

the substrate. Areas not receiving foam plastic insulation must be masked off or otherwise protected from overspray.

4.2 Substrates:

4.2.1 Plywood Substrates: Substrates must be minimum $1\frac{5}{32}$ -inch-thick (11.9 mm), code-complying, exterior-grade or Exposure 1 plywood. All plywood edges must be supported by blocking, have tongue-and-groove joints as required by IBC Section 2603.4.1.5, or 2012 and 2009 IRC Section R316.5.2 or 2006 IRC Section R314.5.2, as applicable, or have a thermal barrier installed separating the interior of the building from the foam plastic in accordance with IBC Section 2603.4, or 2012 and 2009 IRC Section R316.4 or 2006 IRC Section R314.4, as applicable.

4.2.2 Concrete Substrates: Concrete substrates must have a minimum compressive strength of 2500 psi (17.2 MPa). The concrete substrate must be thoroughly cured and must be cleaned prior to application of the primer to ensure proper bonding of the roof system.

4.2.3 Metal Substrates: Metal substrates must be a minimum No. 22 gage galvanized steel [0.030-inch-thick (0.76 mm)] deck. Metal decks must be cleaned of any material that would inhibit bonding of the primer/sealer. Gaps in end laps and sidelaps must be sealed with an approved sealant in accordance with the manufacturer's published installation instructions.

4.3 Roof Slope:

The insulation may be spray-applied to form the required roof slope having a minimum slope of $\frac{1}{4}$:12 (2 percent) and a maximum slope as specified in Table 1.

4.4 Application:

4.4.1 Primer: The SWD Quik-Shield® | 1000 and SWD Quik-Shield® | 2000 primers described in Section 3.5 are applied at the rate of $\frac{1}{2}$ gallon (1.89 L) per 100 square feet (9.29 m²) to concrete and steel substrates and optionally to plywood substrates. The primer is applied at a minimum ambient temperature of 50°F (10°C) and allowed to dry for a minimum of two hours prior to the application of the foam plastic insulation (one hour in hot and dry temperatures). The primer must not be applied when the substrate is wet or damp or when dew, condensation, precipitation, or freezing temperatures are expected prior to, during or immediately after completion of the foam and coating application.

4.4.2 Spray-applied Foam Plastic Insulation: The SWD Quik-Shield® | 125 insulation is applied at a 1:1 ratio by volume of the A and B components to one of the substrates described in Section 4.2.1, 4.2.2 or 4.2.3, using equipment recommended by SWD Urethane. Application of the insulation must be performed when the substrate and ambient temperature is at least 50°F (10°C) and when the wind speed does not exceed 15 miles per hour (24 km/h). The insulation must not be installed when the substrate is wet or damp or when dew, condensation, precipitation, or freezing temperatures are expected immediately before, during or immediately after completion of the foam and coating application.

The insulation is spray-applied in one or more $\frac{1}{2}$ -inch-thick to 2-inch-thick (12.7 mm to 51 mm) passes, to reach a minimum thickness of 1 inch (25.4 mm) on wood substrates or $1\frac{1}{2}$ inches (38 mm) on concrete or metal substrates, and a maximum thickness of 4 inches (102 mm). The total finished thickness must be achieved within 24 hours.

4.4.3 Coating: After the insulation has sufficient strength to support foot traffic, no less than 2 hours nor more

than 72 hours after application of the insulation, the SWD Quik-Shield® | 1929F coating must be brushed, rolled on, or spray-applied directly to the SWD Quik-Shield® | 125 foam plastic insulation. SWD Quik-Shield® | 1929F is applied at the rate specified in Table 1. If the insulation surface is damaged to the extent that cracks, voids or large depressions appear, additional insulation must be applied to create a uniform surface. The first coat must be fully cured before the second coat is applied. The coating must only be applied when the foam plastic insulation surface is dry and free of all damage, dirt and foreign material. The coating must not be applied when dew, condensation, precipitation or freezing temperatures are anticipated immediately before, during, or immediately after completion of the coating application. The ambient temperature must be at least 50°F (10°C) during application of the coating, and above 32°F (0°C) for a 24-hour period after application.

4.4.4 Surfacing:

4.4.4.1 Surfacing with SWD Quik-Shield® | 1929F Acrylic Coating: The coated foam roof system must have a top coat surfacing consisting of SWD Quik-Shield® | 1929F acrylic coating with No. 9 or No. 11 ceramic granules, as shown in Table 1. The granules are applied either on top of the wet base coat or on top of the wet top coat at 40 lbs per 100 square feet.

4.4.4.2 Surfacing with SWD Quik-Shield® | Cementitious Roof Mix (Optional): The SWD Quik-Shield® | Cementitious Roof Mix may be applied over the coated foam roof system, as shown in Table 1. The foam and acrylic coating must be cured and dry prior to application of the cementitious coating.

The cementitious batch consists of 4 $\frac{1}{2}$ gallons (17 L) of water added to 40 pounds (18 kg) of SWD Quik-Shield® | Dry Roof Cementitious Mix, $\frac{1}{2}$ gallon (1.9 L) of SWD Quik-Shield® acrylic resin and $\frac{3}{4}$ ounce (22 mL) of SWD Quik-Shield® acrylic emulsion. The batch slurry is applied on top of the coated foam roof system with 64 pounds (29 kg) of white No. 6 crushed limestone, and is applied at a rate of one batch per 100 square feet (9.3 m²) to a 40 mil (1 mm) thickness.

4.5 Fire Classification:

4.5.1 New Construction: The roof covering systems, when installed in accordance with this report, have the roof classifications described in Table 1.

4.5.2 Reroofing: Prior to installation of new roof coverings, inspection in accordance with IBC Section 1510 or IRC Section R907, and approval from the code official having jurisdiction, are required. The resulting classification is the lower of the new and existing roofing classification. Installation of the new coated foam roofing system must be over existing uninsulated systems only.

4.6 Wind Resistance:

The allowable wind uplift pressure for the coated foam plastic roof covering is limited to that permitted by the code for the sheathing and framing.

5.0 CONDITIONS OF USE

The SWD Quik-Shield® | 125 coated foam roofing system described in this report complies with, or is a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 Installation of the roof covering system must comply with the applicable code, the report holder's published

installation instructions, and this report. If there are any conflicts between the report holder's installation instructions and this report, this report governs.

- 5.2 All materials must be applied by installers approved by SWD Urethane.
- 5.3 Where moderate or heavy foot traffic occurs for maintenance of equipment, or is otherwise necessary, the roof covering must be adequately protected to prevent rupture or wearing of the surface.
- 5.4 Foam plastic insulation must be separated from the interior of the building by an approved thermal barrier in accordance with IBC Section 2603.4 or IRC Section R314.5.2, as applicable.
- 5.5 The deck and supporting structure to which the roof covering is applied must be designed to withstand the applicable wind pressures determined in accordance with ASCE 7.
- 5.6 Flashing must be installed as required by the applicable code.
- 5.7 Use of the foam plastic insulation as a vapor retarder is outside the scope of this report. A vapor retarder must be installed as required by the applicable code.
- 5.8 The polyurethane foam plastic insulation components and the roof coating are manufactured in Mesa, Arizona, under a quality control program with inspections by ICC-ES.

6.0 EVIDENCE SUBMITTED

- 6.1 Data in accordance with the ICC-ES Acceptance Criteria for Spray-applied Foam Plastic Insulation (AC377), revised April 2016).

- 6.2 Reports of physical property tests on SWD Quik-Shield® | 1929F in accordance with ASTM D 6083.
- 6.3 Reports of weathering tests in accordance with IBC Section 1504.6.
- 6.4 Reports of impact resistance tests in accordance with Section 5.5 of FM 4470.
- 6.5 Reports of roof classification tests in accordance with ASTM E 108 and UL 790.
- 6.6 Reports of wind resistance tests in accordance with FM 4470.
- 6.7 Reports of surface-burning characteristics tests in accordance with ASTM E 84 and UL723.

7.0 IDENTIFICATION

Each container of the SWD Quik-Shield® | 125 components, SWD Quik-Shield® | 1929F coating, SWD Quik-Shield® | Cementitious Roof Mix, and SWD Quik-Shield® | 1000 and SWD Quik-Shield® | 2000 primers, must bear a label with the SWD Urethane name and address, product designation, the evaluation report number (ESR-2532), date of manufacture, shelf life and batch number. Additionally, the label for the B component of the polyurethane foam plastic insulation must include the flame-spread index and the density.

TABLE 1—ROOF COVERING SYSTEM FIRE CLASSIFICATION

System Number and Roofing Classification	Polyurethane Insulation			Coating and Application Rate (gal. per 100 sq. ft) ³				Maximum Roof Slope	Substrate ¹
	Product ³ Name	Density (pcf)	Thickness (inches)	Base Coat	Interim Coat (optional)	Top Coat	Surface Coat		
1. Class A	QS 125	2.5 to 3.0	1½ to 4	QS 1929F (1.0)	QS 1929F (1.0)	QS 1929F (1.0 to 2.0)	Granules ²	Unlimited	Noncombustible
2. Class A	QS 125	2.5 to 3.0	1 to 4	QS 1929F (1.0)	QS 1929F (1.0)	QS 1929F (1.0 to 2.0)	Granules ²	Unlimited	Metal or Plywood
3. Class B	QS 125	2.5 to 3.0	1 to 4	QS 1929F (1.0)	QS 1929F (1.0)	QS 1929F (1.0 to 2.0)	Granules ²	2:12	Plywood
4. Class A	QS 125	2.5 to 3.0	1 to 4	QS 1929F (1.0)	-	QS 1929F (1.0)	SWD Quik-Shield Cementitious Roof Mix ⁴	Unlimited	Plywood

For SI: 1 mil = 0.0254 mm, 1 pound/100 square feet = 0.0488 kg/m², 1 oz./yd² = 33.905 g/m², 1 gal/100 feet² = 0.41 l/m².

¹Substrates must comply with Section 4.2 of this report.

²No. 9 or No. 11 ceramic granules, applied while the coating is wet, embedded in the top coat, at a rate of 40 lbs/100ft².

³QS | 125 refers to SWD Quik-Shield | 125 roof foam plastic insulation, QS | 1929F refers to SWD Quik-Shield | 1929F acrylic roof coating. The foam plastic insulation and roof coating must be UL classified.

⁴Must follow the SWD Urethane mixing instructions and Section 4.4.4.2, of this report. River rock or slag approved application can replace cementitious roof mix for this classification.



Arithane

Get Rid of Roof Problems for Good

How spray foam roofing can protect your building and make you money

 QUIK-SHIELD

What is a Spray Foam Roofing System?

40+

YEARS IN SERVICE

Spray foam roofing has a service life of more than 40 years and can be recoated easily at a minimal cost.

Smart Investment

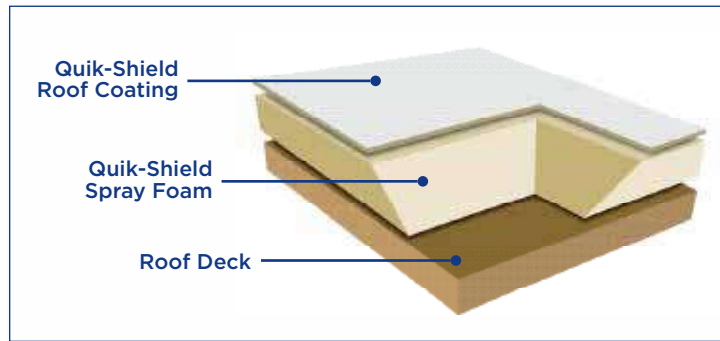
Quik-Shield spray foam roofing systems provide low maintenance costs, long service life, reduction in energy bills, and is the only roofing system that pays for itself.

Learn more about your roofing options, and discover why spray foam roofing is the best roofing system on the market today.



300
MILLION

Board feet of roofing spray foam installed annually in the U.S.



Quik-Shield spray foam roofing system consists of durable lightweight foam and a protective roof coating. It is sprayed in place as a liquid that expands to fill cracks and crevices and then forms as a hard durable monolithic roof surface.

Conventional Roofing

If you have a conventional roofing system chances are you have significant roofing problems. Roof leaks, water damage, flashing trouble, high energy bills, and high maintenance costs, are probably some of the issues you encounter on a regular basis.

70%
PROBLEMS

70% of significant building problems are related to roofs and building envelopes.*

100% SOLUTION

Spray Foam Over Existing Roof

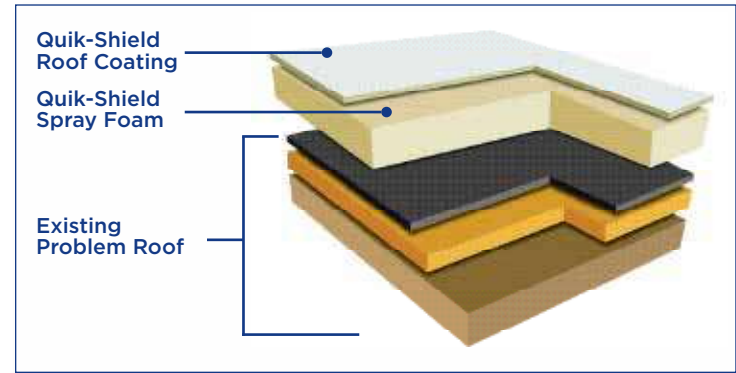


Installing a Quik-Shield spray foam roofing system can solve most existing roofing issues. In most cases a spray foam roof can be installed directly over your existing roof without its removal. Best of all your new Quik-Shield roof will start paying for itself through energy savings and significant reduction in maintenance costs.



4.5
YEARS

Number of years to recover the complete cost of a spray foam roof through energy savings**

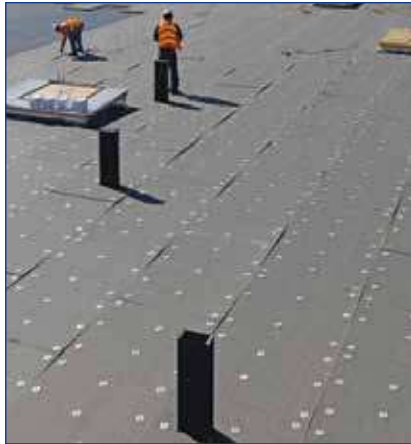


*70% of all liability claims- Associated General Contractors of America, American Bar Association **Texas A&M University study

Conventional Roofing - Seams and Fasteners

20,000
FASTENERS

Number of leak potential fasteners on a 40,000 square foot roofing system with polyiso board.



1.3
MILES OF
LEAKY SEAMS

A single ply roofing system has seams that are prone to leaking. On a 40,000 square foot roof these leak potential seams can stretch the length of 7,200 feet or twenty football fields.

23%

R-VALUE LOSS

Fasteners cause thermal bridging dramatically lowering the insulation value and energy-efficiency of the building.*

**20,000 screws
weigh 250 lbs.**



*ASHRAE and ORNL

Quik-Shield - Spray Foam Roofing System

ZERO

NO SEAMS NO FASTENERS

Number of leak potential joints, seams, and fasteners on a Quik-Shield spray foam roofing system.

Quik-Shield Seamless Monolithic System

From wall-to-wall Quik-Shield provides a seamless roof install with no mechanical fasteners, providing the building with an unsurpassed air barrier and increased thermal resistance. Quik-Shield also provides self-flashing around HVAC curbs, vents, and skylights, adding additional protection against moisture and air infiltration.



Conventional Roofing – Roof Failures

The Superdome Roofing Failure

- Half of the 9.7 acre EPDM single ply membrane was blown off during hurricane Katrina, and led to collapse of two 20'x5' sections of the roof
- Lack of an air barrier and leaks in the EPDM membrane contributed to the failure
- New Superdome roof has been fixed with a spray foam roofing system

\$185
MILLION

Cost to repair damage
to The Superdome
after hurricane Katrina



Conventional Roofing Systems

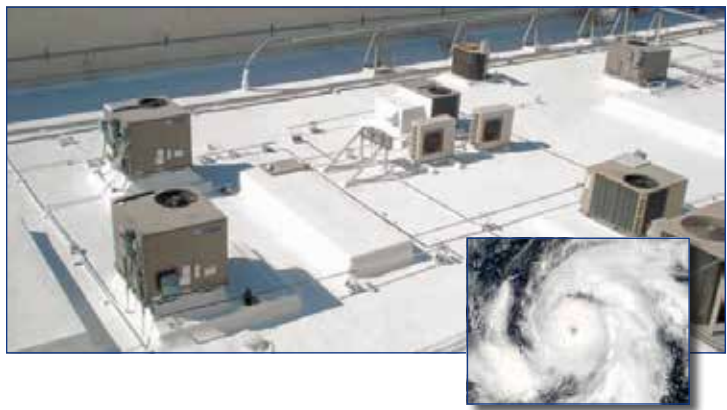
40%

Serious Problems within 1 Year*

*National Roofing Contractors Association (NRCA)

Quik-Shield - Severe Storm Resistant

Quik-Shield spray foam roof systems fair better in extreme weather, including hail, high winds, and falling debris. A post-Hurricane Katrina study concluded that all spray foam roofs but one minor exception sustained the hurricane without blow-off of the SPF or damage to flashings.* Spray foam roofing systems perform extremely well in hurricane conditions, helping keep roofs intact, and buildings moisture free.



Spray Foam Roofing Systems

97.6%

NO Leaks at average age of 10 Years**

*National Institute of Science Technology (NIST) **Del E. Webb School of Construction at Arizona State University

Energy Savings - Quik-Shield Roofing Systems

Save 40% Heating and Cooling

CONDUCTION



92%

Heat transfer blocked
by 2" of Quik-Shield
spray foam*

CONVECTION



83%

Reduction in air
leakage**



40%

Reduction in
natural gas bills**



25%

Reduction in
total electrical
consumption**



82%

Amount of solar
energy reflected
away***

*ICC-ES **National Institute of Standards and Technology (NIST) ***Cool Roof Rating Council (CRRC)

Lifecycle Costing - Comparing Systems



Single Ply

PVC, TPO, EPDM

\$4.00



Built Up Roof

With Cap Sheet

\$2.95



Built Up Roof

With Gravel Ballast

\$2.65



Spray Foam Roofing System

\$0.85

*National Roofing Contractors Association (NRCA)

Sustainability - Comparing Systems



Construction Waste for a 40,000 sqft Roof over 30 years*



Built-Up Roof
with Gravel Ballast

360,800 lbs



Built-Up Roof
with Cap Sheet

176,800 lbs



**Single Ply
Roofing System**
Fully Adhered

70,000 lbs



QUIK-SHIELD
**Spray Foam
Roofing System**

55 lbs

*Assumes traditional roof tear-off at end of typical system lifespan

Quik-Shield - Advantage

			EFFICIENCY
BUILT UP	SINGLE PLY	SPRAY FOAM	
✗	✗	✓	Low Lifecycle Cost Inexpensive to maintain over the life of the building
✗	✗	✓	Energy-Efficient Save 40% or more off of heating and cooling bills
✗	✗	✓	Air Barrier The roofing material is a qualified air barrier
✗	✓	✓	Cool Roof High solar reflectance to reduce building cooling costs

			DURABILITY
BUILT UP	SINGLE PLY	SPRAY FOAM	
✗	✗	✓	Seamless Designed without the use of seams that can be prone to leak
✗	✗	✓	Self Flashing Eliminates the use of traditional flashing that is the cause of most roof leaks
✓	✗	✓	No Fasteners Eliminates the use of fasteners that cause thermal bridging and are potential leak points
✗	✗	✓	Storm Resistant High wind uplift, hail, and flying debris resistance

			SUSTAINABILITY
BUILT UP	SINGLE PLY	SPRAY FOAM	
✗	✗	✓	Long Life Span Roofing system designed to last over 30 years
✗	✗	✓	Low Maintenance Little to no maintenance required
✗	✗	✓	Sustainability The roofing system has little construction waste over the life of the building
✗	✗	✓	No Tear-off Can be placed over other roofing systems without tear-off of old roof



Arithane

arithane.com

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800-821-5926

Located in southwest California, Arithane has been providing outstanding service to our clients since 1972. We have spray-applied over 100 million square feet of spray foam roofing and, in the process, have established a reputation of integrity and reliability.



The Quik-Shield brand is owned and operated by:

SWD Urethane

800-828-1394 • swdurethane.com



7.2



PROPOSITION 39 – HVAC REPLACEMENTS

BACKGROUND

- 12.17.2017 - First Note Financial prepared and submitted on behalf of Pacific View Charter School an Energy Audit Report to California Energy Commission for our Prop. 39 Energy Expenditure Plan.
- 01.02.2018 - California Energy Commission approved our Energy Expenditure Plan Report granting Pacific View Charter School the sum of \$75,000.00 to replace the existing Heating, Ventilation and Air Conditioning units (HVAC) at our Moreno Valley Facility.
- First Note Financial facilitated the bidding process releasing a Request for Proposals (RFP) on 02.02.2018 to eleven (11) bidders and holding an onsite Bidder's Walkthrough on 02.20.2018.
- A total of four (4) proposals were received.
 - Comfort Demand
 - Jackson & Blanc
 - EMCOR Services
 - Q-Services Heating & AC, Inc.
- First Note Financial created the attached Pacific View HVAC Bids and Budget.
- PVCS staff met with our First Note Financial Project Manager, Leslie Pluma, to review all submitted bids.

STAFF RECOMMENDATION:

Staff recommends the acceptance of Emcor Services bid in the amount of \$126,548.00 (attached). This bid includes upgrades to condensation lines to be code compliant and replacements of all facility thermostats to assure proper performance of replacement equipment.



Mesa Energy Systems, Inc.

Pacific View Charter School

Presented to:

Pacific View Charter School
22695 Alessandro Blvd.
Moreno Valley, CA 92553

Prepared by:

Aaron Fletcher
EMCOR Services – Mesa Energy Systems, Inc.
Phone: 949-254-3114
Aaron_Fletcher@EMCORGroup.com

3/7/18

Proposal # 182562R4
CA license #: 611215

This proposal, scope of work, and pricing is valid for 30-days.

Confidentiality notice: This document and any attachments thereto, regardless of form or

Confidentiality notice: This document and any attachments thereto, regardless of form or medium, may contain legally privileged and/or confidential, copyrighted, trademarked, patented or otherwise restricted information viewable by the intended recipient only.

Introduction

We at Mesa Energy Systems, Inc. (an EMCOR Group company) would like to thank you for the opportunity to submit this proposal to remove and replace (5) rooftop package units. We believe that our proposed package would meet or exceed your maintenance, reliability, and energy savings goals.

For over 30-years, Mesa Energy Systems has provided its clients with high quality mechanical, commercial HVAC, building automation consulting and services, and energy solutions that address today's most compelling energy related issues. Headquartered in Irvine, California, we have 10 statewide offices to better serve the greater Los Angeles, San Diego, San Francisco, Sacramento, Bakersfield, San Jose, Pleasanton, and Fresno market areas. In addition, we've expanded outside California and now have offices in Reno, Las Vegas and Phoenix.

Our Customer's increasingly complex needs have transformed Mesa Energy Systems from a traditional commercial HVAC service and retrofit company into a full-service Energy Solutions Company. Our goal is to help you achieve optimal building energy performance, utilizing improved building and mechanical maintenance, ongoing retro-commissioning, and favorable ROI energy retrofits.

Today, thanks to our Customer partnerships and our commitment to our core values (Sense of urgency, Win-Win, Accountability, Passion, and Love), Mesa Energy Systems Inc. is Southern California's leading HVAC service and retrofit contractor.

We are extremely confident that we will deliver on every aspect detailed in the proposal.

Again, thank you for giving Mesa Energy Systems the opportunity to be of service. We look forward to the prospect of working with you and assisting you with your facilities' HVAC maintenance and upgrade needs. Feel free to reach out to us should you want to discuss anything further.

Sincerely,

EMCOR Services / Mesa Energy Systems

Aaron Fletcher
Director of Business Development

Proposal Summary

We are pleased to provide you with this proposal to remove and replace (5) rooftop package units.

Scope of Work

Below is the proposed scope of work:

1. Arrive on site during regular business hours; work is to take place at a time when the school is not occupied, if customer requests work to be performed after hours additional costs incurred will be passed on to the customer.
2. Check in with building personnel prior to beginning work.
3. Perform pre-construction air balance to verify ductwork leaks.
4. Safe off electrical power supply by utilizing industry standard lock out/tag out procedure.
5. Disconnect power wiring, condensate drain piping, and prep units for removal.
6. Furnish the proper size crane to remove the existing units and rig the new into place.
7. Remove units from the roof and dispose off-site per EPA guidelines.
8. Provide and install new adapter curbs for installation of the new units.
9. Furnish and install (5) new Carrier rooftop package units with the following features:
 - a. 4, 5, 7.5, 10 and 15 Ton heat pump rooftop package units.
 - b. Medium static option fan, belt drive, and RTU open controller.
 - c. Title-24 compliance economizers.
 - d. 2-Speed indoor fan with VFD controller for units >7.5 tons.
10. Reconnect existing condensate drain piping to each of the units.
11. Penetrate roof to run condensate lines into building plumbing.
 - a. Roof penetration will be flashed and water tight.
12. Furnish and install new electrical disconnect switch and fuses for each of the new rooftop package units.
13. Furnish and install smoke detectors in the supply air duct on all units over 4.5-tons.
14. Start-up and test for proper operation.
15. Provide labor and materials to integrate the new unit BACnet cards into a new Distech controls system. (Shown as add option in pricing matrix)
16. Clean-up work area and check out with building personnel upon completion of work.

Exclusions and Clarifications

1. Tie-in with Fire Life Safety (FLS) system is the responsibility of the existing FLS contractor and is not included in this scope of work.
2. No new roofing is included in this scope of work.
3. Replacement of the rooftop exhaust fans is specifically excluded.
4. Any modifications to the line of site screen are not included in this scope of work.
5. Unit efficiency ratings are listed below; the ratings listed below are the highest that any manufacturer can offer on heat pump units of these sizes:
 - a. 4-Ton 15.8 SEER
 - b. 5-Ton 15 SEER
 - c. 7.5-Ton 12.1 EER
 - d. 10-Ton 12.3 EER
 - e. 15-Ton 10.8 EER
6. Per manufacturer comments these units will be Prop 39 compliant.
7. Per manufacturer comments below, the new Carrier units can be integrated seamlessly with Distech controls through BacNET.

GENERAL

The RTU Open controller is an integrated component of the Carrier rooftop unit. Its internal application programming provides optimum performance and energy efficiency. RTU Open enables the unit to run in 100% stand-alone control mode, Carrier's i-Vu[®] Open network, or a **Third Party Building Automation System (BAS)**. On-board DIP switches allow you to select your protocol (and baud rate) of choice among the four most popular protocols in use today: **BACnet[®]**, Modbus, Johnson N2 and LonWorks. (See Fig. 1.)

Inclusions and Exclusions

Checked items below are included in this proposal; non-checked items are excluded.

Engineering, Permits & Bonds			
Mechanical Engineering	<input checked="" type="checkbox"/>	Structural Engineering	<input checked="" type="checkbox"/>
Electrical Engineering	<input type="checkbox"/>	Plan Check Fees	<input type="checkbox"/>
Mechanical Permits	<input checked="" type="checkbox"/>	Electrical Permits	<input type="checkbox"/>
Structural Permits	<input type="checkbox"/>	Street Closure Permits	<input type="checkbox"/>
Performance Bond	<input type="checkbox"/>	Architectural Drawings	<input type="checkbox"/>
Rigging and Specialty Rentals			
Rigging	<input checked="" type="checkbox"/>	Scissor Lift as Required	<input type="checkbox"/>
Helicopter	<input type="checkbox"/>	Other:	<input type="checkbox"/>
Additional Services			
Comfort Air Balance	<input type="checkbox"/>	Certified Air Balance	<input checked="" type="checkbox"/>
Water Balance	<input type="checkbox"/>	Certified Water Balance	<input type="checkbox"/>
Recover Refrigerant Per EPA Guideline	<input type="checkbox"/>	Dispose of old Equipment	<input checked="" type="checkbox"/>
Project to be Performed at the Below Listed Times			
Normal Business Hours (M-F 7 am to 5 pm)	<input checked="" type="checkbox"/>	Overtime (non-Normal Business Hours)	<input type="checkbox"/>
Normal Hours and Overtime	<input type="checkbox"/>	Other:	<input type="checkbox"/>
Specialty Trades			
Electrical	<input checked="" type="checkbox"/>	Abatement	<input type="checkbox"/>
Framing of Curbs & Openings	<input type="checkbox"/>	Duct Sealing	<input type="checkbox"/>
Re-roofing	<input type="checkbox"/>	Seismic Upgrades	<input type="checkbox"/>
Insulation of New Ducting (As Required)	<input type="checkbox"/>	Insulation of New Piping (As Required)	<input type="checkbox"/>
Coring	<input checked="" type="checkbox"/>	X-Ray Prior to Coring	<input type="checkbox"/>
Project Completion			
Start Up and Commissioning	<input checked="" type="checkbox"/>	Factory Start Up	<input type="checkbox"/>
Operation & Maintenance Manuals	<input checked="" type="checkbox"/>	As Built Drawings	<input type="checkbox"/>
Additional Components			
New Programmable Digital Thermostat	<input type="checkbox"/>	EMCOR Retains All Salvage Rights	<input checked="" type="checkbox"/>
Smoke Detectors in Supply Duct	<input checked="" type="checkbox"/>	Smoke Detectors Return Ducts	<input type="checkbox"/>
Warranties			
90-Day Labor and Materials from Date of Beneficial Use	<input type="checkbox"/>		<input type="checkbox"/>
One (1) year Labor and Materials from Date of Beneficial Use	<input type="checkbox"/>		<input checked="" type="checkbox"/>

General Project Clarifications

Concealed Conditions

If concealed or unknown conditions of an unusual nature which affect the performance of the work are encountered below the roof line or above the ceiling or in an existing part of the building other than the work, which conditions are not ordinarily found to exist or which differ materially from those generally recognized as inherent in work of the character provided for in this Agreement, notice by the observing party shall be given promptly to the other party, if possible before conditions are disturbed and in no event later than fourteen days after first observance of the conditions. The Contract Sum shall be equitably adjusted for such concealed or unknown conditions by Change Order upon claim made within fourteen days after claimant becomes aware of the conditions.

Regulatory Changes

Mesa Energy Systems Inc. shall be compensated for changes in the Work necessitated by the enactment or revision of codes, laws or regulations subsequent to the execution of this Agreement.

Hazardous Materials

PACIFIC VIEW CHARTER SCHOOL hereby agrees to indemnify, defend and hold harmless Mesa Energy Systems, Inc. and its agents, employees, consultants and subcontractors from and against any claim, damage, allegation, suit, cause of action, cost, loss, expense or injury in connection with Hazardous Materials not introduced to the Project by the Indemnified Parties, including, without limitation, all costs of remediation, experts, consultants or other costs in connection with Hazardous Materials associated with the Project.

Unforeseen Conditions

PACIFIC VIEW CHARTER SCHOOL understands and agrees that Mesa Energy Systems, Inc. shall not be liable for added costs or time delays caused by unforeseen conditions at the Project, including, without limitation, unanticipated rerouting of existing piping, fire sprinklers or gas piping. In the event that the fire sprinklers, water, electrical conduit or gas piping are required to be relocated, Mesa shall not be responsible for such work. Mesa Energy Systems, Inc. or a subcontractor under the control and supervision of PACIFIC VIEW CHARTER SCHOOL shall perform such work.

NFPA 70E

Mesa technicians are trained to understand the specific hazards associated with electrical energy according to NFPA 70E, Standard for Electrical Safety in the Workplace. They are trained in safety-related work practices and procedural requirements as necessary to provide protection from the electrical hazards associated with their respective job or task assignments. Documented safe work practices include lockout/tagout and energy isolation. Category 2 personal protective equipment is issued for electrical hazards while working on voltages between 50 and 480 volts. Mesa's policy is to remove the energized electrical hazard by working on de-energized circuits and by using the written lockout/tagout policies and procedures when feasible.

Terms and Conditions

- A. Unless stated otherwise in this agreement, services provided under this agreement will be performed during normal working hours of 7 a.m. to 5 p.m., Monday through Friday.
- B. The guarantees and services provided under the scope of this agreement are conditioned upon PACIFIC VIEW CHARTER SCHOOL operating and maintaining systems/equipment. PACIFIC VIEW CHARTER SCHOOL will do so in accordance with industry-accepted practices, or in consideration of our recommendations.
- C. PACIFIC VIEW CHARTER SCHOOL will provide and permit reasonable access to all areas where work is to be performed. Mesa Energy Systems, Inc. will be allowed to start and stop equipment as necessary to perform its services and be permitted use of existing facilities and building services.
- D. Any repairs or services resulting from power failures, freezing, roof leaks through curbs or equipment, or air side corrosion will be paid for by the PACIFIC VIEW CHARTER SCHOOL in accordance with Mesa Energy Systems, Inc.'s currently established rates.
- E. The agreement does not include responsibility for system design deficiencies, such as, but not limited to poor air distribution, water flow imbalances, system equipment and component obsolescence, electrical failures, unserviceable equipment, and operating the system(s), unless otherwise stated in this Agreement.
- F. Mesa Energy Systems, Inc. will not be liable for delays or failure to obligate due to fire, flood, strike, lockout, freezing, unavailability of material, riots, acts of god, or any cause beyond reasonable control.
- G. Mesa Energy Systems, Inc. is not responsible for the removal or disposal of any hazardous materials or any cost associated with these materials unless otherwise noted in this Agreement.
- H. The agreement does not include repairing any damage resulting from improper/inadequate water treatment or filter service not supplied by Mesa Energy Systems, Inc.
- I. This agreement does not include any services occasioned by improper operation, negligence, vandalism, or alterations, modifications, abuse, or misuse, or repairs to equipment not performed by Mesa Energy Systems, Inc. Unless otherwise agreed, also excluded is the furnishing of materials and supplies for painting or refurbishing existing equipment.
- J. Mesa Energy Systems, Inc. shall not be required to furnish any items of equipment, labor, or make special tests recommended or required by insurance companies, Federal State Municipal or other authorities except as otherwise included in this Agreement.
- K. In the event either party must commence a legal action in order to enforce any rights under this contract, the successful party shall be entitled to all court costs and reasonable attorney's fees as determined by the court for prosecuting and defending the claim, as the case may be.
- L. Mesa Energy Systems, Inc. shall not be liable for the operation of the equipment nor for injuries to persons or damage to property, except those directly due to the negligent acts or omissions of its employees and in no event shall it be liable for consequential or speculative damages. It shall not be liable for expense incurred in removing, replacing or refinishing any part of the building structure necessary to the execution of this Agreement. It shall not be held liable for any loss by reason of strikes or labor troubles affecting its employees who perform the service called for herein, delays in transportation, delays caused by priority or preference rating, or orders or regulations established by any government, authority, or by unusual delays in procuring supplies or for any other cause beyond its reasonable control.
- M. Only Mesa Energy Systems, Inc.'s personnel or agent are authorized to perform the work included in the scope of this agreement. Mesa Energy Systems, Inc. may, at its option, cancel or waive its obligations under this Agreement should non-authorized individuals perform such work.
- N. This Agreement and all rights hereunder shall not be assignable unless approved by Mesa Energy Systems, Inc. In the event of additional freight, labor, or material costs resulting from a PACIFIC VIEW CHARTER SCHOOL's request to avoid delays with respect to equipment warranties, or accelerated delivery of parts and supplies, the customer agrees to pay these additional costs at Mesa Energy Systems, Inc.'s currently established rates.
- O. Mesa Energy Systems, Inc.'s scope of work shall not include the identification, detection, abatement, encapsulation or removal of asbestos or products or materials containing asbestos or similar hazardous substances. In the event Mesa Energy Systems, Inc. encounters such material in performing its work, Mesa Energy Systems, Inc. will have the right to discontinue work and remove its employees until the hazard is corrected or its determined no hazard exists.
- P. This Agreement contains the entire Contract and the parties hereby agree that this Agreement has been agreed to and the entire Agreement is then accepted and approved by an authorized person for both parties, and no statement, remark, agreement or, understanding, oral or written, not contained herein, will be recognized or enforced.
- Q. This agreement does not include the disposal of hazardous waste; any charges incurred for their proper disposal will be borne by the Customer as an extra to the contract price.
- R. The PACIFIC VIEW CHARTER SCHOOL agrees that in the event that there shall have been passed a federal and/or state law which shall compel Mesa Energy Systems, Inc. to contribute to a federal and/or state health plan for its employees, then the terms of this Agreement shall be subject to adjustment to the extent that the cost of such mandated contributions increase by Mesa Energy Systems, Inc.'s cost of performing this contract.
- S. The PACIFIC VIEW CHARTER SCHOOL acknowledges and agrees that any purchase order issued by PACIFIC VIEW CHARTER SCHOOL, in accordance with this Agreement, is intended only to establish payment authority for PACIFIC VIEW CHARTER SCHOOL's internal accounting purposes. No purchase order shall be considered to be a counteroffer, amendment, modification, or other revision to the terms of this agreement. No term or condition included in the PACIFIC VIEW CHARTER SCHOOL's purchase order will have any force or effect.

Project Cost

The total cost including applicable taxes is: **See Matrix at Bottom**

This proposal, scope of work, and pricing is valid for 30-days from the date of this proposal.

Payment Terms

30% Mobilization due net 30-days
Remaining balance paid via progress billings due net 30-days

Agreement Execution

This agreement defines the understanding of services between Mesa Energy Systems Inc. and PACIFIC VIEW CHARTER SCHOOL. This agreement shall begin on Pacific View Charter School's Acceptance Date, or upon receipt of a Letter of Intent.

Pacific View Charter School Acceptance:

Mesa Energy Systems Inc:

Signature

Signature

Printed Name

Printed Name

Title *Date*

Title *Date*

Company Profile

1. Mesa Energy System, Inc.
 - a. Corporation
 - b. 2 Cromwell, Irvine CA, 92618
 - c. Approximately 800 Current Employees
 - d. Company Established in 1985
 - e. Current Certifications (C20, C10, B, C38, C36, C04, C46
 - f. Approximately 500 Completed Commercial HVAC Retrofit Projects Since 2012
 - g. President, CEO Robert Lake
 - h. Project Manager, Jeremy Jones, (949) 405-7777, Jeremy_Jones@emcor.net

EMCOR SERVICES / MESA ENERGY SYSTEMS QUALIFICATIONS

EMCOR Services Mesa Energy Systems (EMCOR/Mesa) is a wholly owned subsidiary of EMCOR Group, Inc. EMCOR Group is a Fortune 500 global leader in mechanical and electrical construction, energy, and facilities services. FORTUNE Magazine named EMCOR "2011 Fortune's Most Admired Company's" and EMCOR is again ranked #1 as the World's Most Admired Company in the Engineering and Construction Category. This is the third consecutive year as #1 in the World and the fourth consecutive year as #1 in America.

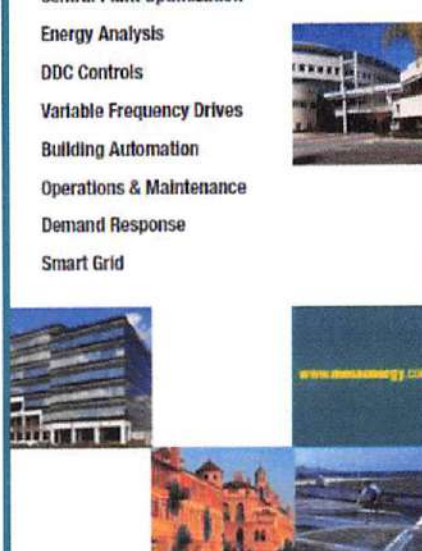
EMCOR/Mesa is a licensed HVAC maintenance, service, building automation, and retrofit contracting company, headquartered in Irvine, California. We have 10 offices blanketing Southern and Northern California. The recent demands of the marketplace have transformed us into an Energy Solutions Company, assisting our customers in achieving optimal building energy performance, improved maintenance, ongoing retrofit, and ongoing commissioning resulting in favorable ROI energy retrofits.

Collectively, EMCOR/Mesa has completed more than 50,000 mechanical and BAS-type projects nationwide, including more than 500 projects for buildings in Southern California that have in excess of 500,000 square feet. Since our inception in 1983, EMCOR/Mesa has remained steadfast in our commitment to exceptional safety standards and quality construction. We have earned a reputation for providing value to our many satisfied customers through high-quality services, and efficient, cost-effective, customized retrofit solutions.

To meet these challenges, EMCOR/Mesa has assembled a team of outstanding capabilities and reputations for ethical business practices; assigned our most experienced and talented project management and support staff; and developed an approach that delivers best-value to PACIFIC VIEW CHARTER SCHOOL on this critical contract.

SERVICES PROVIDED:

- HVAC Service & Retrofit
- Central Plant Optimization
- Energy Analysis
- DDC Controls
- Variable Frequency Drives
- Building Automation
- Operations & Maintenance
- Demand Response
- Smart Grid



www.mesaenergy.com

using

than

with

Build. Power. Service. Protect.
That's The EMCOR Advantage™

EMCOR/MESA PAST PERFORMANCE

The EMCOR/Mesa Team has successfully completed relevant projects for many clients throughout Southern California and nationwide. The Team has demonstrated successful implementation of management actions to identify and mitigate potential problems while providing quality products and services safely, within budget, and on schedule.

RECENT PROJECTS

Recent relevant local projects include:

Client	Location	Scope of Work	Contact Information
Universal Hilton	Universal City CA	Design build retrofit of a 1000 ton central plant with an all Variable Speed chiller and pumping system and DDC controls, Solving Main Ball room and Foyer heating and control issues. Control upgrade of main area air handling units. Largest PACE program funded in the US to date	Steve Thompson Facilities Manager 818.506.2500
Pasadena Unified School District (PUSD)	Pasadena, CA	EMCOR/Mesa has completed installations/integrations/retrofits/repairs of systems (including 21 chillers, 14 Turbocor compressors, 2 Optimum Loop Controls, 46 VFDs, multiple dampers, and electrical systems) at more than 12 elementary/middle/high schools (more than 3 million GSF) totaling more than \$4.9M	Frazer Thompson Owner's Rep. 661.607.5891
Pasadena City College	Pasadena, CA	EMCOR/Mesa completed a \$3.1M project for the installation/replacement of two 500 ton chillers and eight associated pumps, pipes, DDC controls, six large DX coils, ASHRAE 15 ventilation system, Optimum Loop Control system, electrical conduit and wiring for a facility larger than 500,000 GSF.	Sam Kazarian Chief Engineer 818.321.1412
California Institute of Technology	Pasadena, CA	EMCOR/Mesa completed \$800K in VFD, HVAC, and controls installation/repairs for facilities totaling more than 1 million GSF.	Matthew Berbee Energy Manager 626.399.1915
US Federal Courthouse, 300 Los Angeles St	Los Angeles, CA	Under this \$2.4M project, EMCOR/Mesa installed 2,700 tons of York YK chillers, VFD retrofit of 2850 tons of Trane CVHF and CDHP chillers, Separation of 150 and 300 PSI plants, Variable CHW and CDW pumping, CHW coil replacement and DDC controls upgrade without disruption to 2.5 million square feet of federal building operations.	Stevie Martin Facilities Manager 213.625.2274

PAST PERFORMANCE MATRIX

The matrix listed on the pages that follow includes a snapshot of many other projects that we have completed throughout Southern California.

Building Name, Location	SF	Value	Cooling Tower Repair	VFD Installation	HVAC Installation	HVAC Repair	Large Chiller Replacement	Controls Installation	Controls Programming	Metering Installation	HVAC and Controls D-B	Timely Project Completion (2)	Quality Project Completion (5)	Met All Expectations (6)	Will Use EMCOR/Mesa on Future Projects
GSA Federal Courthouse, Los Angeles, CA	>500,000	\$890K			◆			◆	◆		◆	◆	◆	◆	◆
Jerry L. Pettis Veterans Hospital, Loma Linda, CA	>500,000	\$5.0M	◆	◆			◆					◆	◆	◆	◆
Providence Tarzana Medical, Tarzana, CA	>500,000	\$800K		◆			◆	◆	◆			◆	◆	◆	◆
Harman Business, Complex, Northridge, CA	600K	\$340K			◆							◆	◆	◆	◆
Travis AFB, David Grant Medical Center, Fairfield, CA	>500,000	\$18M			◆						◆	◆	◆	◆	◆
Pasadena City College, Pasadena, CA	>500,000	\$3.2M	◆	◆	◆		◆	◆	◆		◆	◆	◆	◆	◆
Pasadena Unified School District, Pasadena, CA	>500,000	\$893K		◆	◆	◆		◆	◆		◆	◆	◆	◆	◆
Pasadena Unified School District, Pasadena, CA	>500,000	\$234K						◆	◆		◆	◆	◆	◆	◆
Pasadena Unified School District, Pasadena, CA	>500,000	\$395K							◆		◆	◆	◆	◆	◆
Pasadena Unified School District, Pasadena, CA	1.5 M	\$3.4M		◆	◆	◆		◆	◆		◆	◆	◆	◆	◆
Torrance Memorial Medical Center, Torrance, CA	>500,000	\$66K	◆									◆	◆	◆	◆
La Paz Building 7, Laguna Hills, CA	>500,000	\$165K			◆							◆	◆	◆	◆
Cal State LA Plant Refurbishment, Los Angeles, CA	>500,000	\$393K	◆	◆		◆		◆	◆	◆	◆	◆	◆	◆	◆
Cal Tech Institute Energy Conservation Measures - Phase 1, Pasadena, CA	>500,000	\$333K		◆	◆	◆		◆				◆	◆	◆	◆
Cal Tech Institute Energy Conservation Measures -	>500,000	\$477K		◆	◆	◆		◆				◆	◆	◆	◆

Building Name, Location	SF	Value	Cooling Tower Repair	VFD Installation	HVAC Installation	HVAC Repair	Large Chiller Replacement	Controls Installation	Controls Programming	Metering Installation	HVAC and Controls D-B	Timely Project Completion (2)	Quality Project Completion (5)	Met All Expectations (6)	Will Use EMCOR/Mesa on Future Projects
Phase 2, Pasadena, CA															
City National Plaza Cooling Towers, Los Angeles, CA	2.5 M	\$62K	◆	◆				◆				◆	◆	◆	◆
Pasadena City College, Pasadena, CA	>500,000	\$462K	◆	◆			◆	◆				◆	◆	◆	◆
Historic Mission Inn Hotel Central Plant, Riverside, CA	>500,000	\$135K	◆	◆	◆		◆	◆				◆	◆	◆	◆
Pasadena City College, Pasadena, CA	>500,000	\$833K	◆					◆				◆	◆	◆	◆
City National Plaza 35 Boilers Project, Los Angeles, CA	2.5 M	\$684K			◆			◆				◆	◆	◆	◆
City National Plaza Cooling Towers, Los Angeles, CA	2.5 M	\$264K	◆					◆				◆	◆	◆	◆
300 N. Brand Building, Pasadena, CA	>200,000	\$637K	◆	◆	◆		◆	◆	◆		◆	◆	◆	◆	◆
2700 Colorado Avenue Building, Pasadena, CA	>500,000	\$43K	◆									◆	◆	◆	◆
Antelope Valley Hospital, Lancaster, CA	700,000	\$600K					◆	◆	◆		◆	◆	◆	◆	◆
City National Plaza 35 Boilers Project, Los Angeles, CA	2.5 M	\$208K		◆	◆			◆		◆		◆	◆	◆	◆
City National Plaza Cooling Towers, Los Angeles, CA	2.5 M	\$62K	◆	◆				◆				◆	◆	◆	◆
City National Plaza Boilers and Piping, Los Angeles, CA	2.5 million	\$37K					◆					◆	◆	◆	◆
Pasadena City College, Pasadena, CA	> 500,000	\$76.6K					◆					◆	◆	◆	◆

EMCORs PROJECT TEAM & TECHNICAL APPROACH

The section below describes EMCOR'S Project Build Design Team and Technical Approach that will ensure Hines of the successful project completion of the HVAC and Controls retrofit at PACIFIC VIEW CHARTER SCHOOL.

PROJECT BUILD DESIGN TEAM

EMCOR/Mesa has created a design and execution team consisting of Mr. Tony Ghaffari, Vice President of Engineering, Mr. Ron Hickey, Vice President of Project Management and Retrofits, Mr. Wayne Lacher, Senior Project Manager, and myself, Aaron Fletcher, Director of Business Development. This team has been given the responsibility of reviewing the project design, establishing project specifications, establishing construction schedules, and execution strategies. Our team will interface with PACIFIC VIEW CHARTER SCHOOL internal team assigned with overseeing and directing the retrofit of rooftop units. Our team will thoroughly evaluate the challenges of completing the proposed project with minimal impact to the operating standards. This team is responsible to complete the proposed project on time and on budget.

Director of Retrofit Construction



Mr. Ron Hickey, Sr. Vice President, General Manager So. Cal

Mr. Hickey has over twenty-five years of experience in managing HVAC related projects. Mr. Hickey will be familiar with the project requirements, specifications including the review of the CPM project completion schedule and maintaining a safety plan for the project. Mr. Hickey will be responsible to support and resource Mr. Lacher in any way needed to ensure successful completion of the Project.

Mechanical Engineering



Tony Ghaffari, Vice President of Engineering

Mr. Ghaffari is Vice President of engineering for EMCOR Service/ Mesa Energy Systems, Inc.. Mr. Ghaffari helps clients analyze, evaluate, design and implement energy and other retrofit solutions engineered for optimum performance and long range value. After gaining an understanding of a client's wants and needs, he identifies options and recommends innovative ways to improve energy efficiency and increase energy savings. Once a project is under way, he monitors its progress to ensure that all engineering specifications are adhered to and that the finished installation meets the client's performance expectations. Mr. Ghaffari has more than twenty years of industry experience.

After holding project manager and regional project manager positions with York, he moved to Johnson Controls, where he was area construction sales manager with a five state territory. He joined Mesa in 2001 as director of engineering and business development. Mr. Ghaffari has extensive expertise in designing and engineering HVAC systems, and in analyzing their financial performance. Over the years, he has also accumulated considerable knowledge of thermal storage systems, chiller plants, power generation projects, boiler systems and package rooftop units, as well as direct digital controls and systems integration. He holds a bachelor's and master's degree in mechanical engineering from the University of Colorado Boulder. Mr. Ghaffari will be responsible to oversee the production of the mechanical specifications, plans and construction documents needed to complete the project.

EMCORs PROJECT TEAM & TECHNICAL APPROACH (continued)

Director of Retrofit

Mr. Wayne Lacher, Director of Retrofit and Business Development



Mr. Wayne Lacher has over twenty-eight years experience in the HVAC industry. Mr. Lacher has had experience in the installation, and service of all sizes of packaged AC equipment, air handlers, chillers, cooling towers, boilers, air compressors, EMS systems and variable speed drives. He has worked with conduit and wiring installation, panel building, ductwork sizing and engineering, duct installation, mechanical piping and general sheet metal fabrication and installation. He has experience with rigging using cranes up to 500 tons and multiple size helicopter lifting. He provides and maintains CPM schedules for review by management and the customer's project team.

Bid Form

1	Prepare and Submit Feasibility Study	Included
2	Obtain Engineering and Permits	\$10,507
3	Secure and Assist with Collection of Rebates	N/A
4	Replace (5) Packaged Heat Pumps	\$74,723
5	Removal/Disposal	Included
6	System Commissioning	\$ 4,108
7	Other Costs: Air Balance	\$ 4,268
	Fixed Turnkey Price, 22695 Alessandro Blvd	\$ 93,606

Project Added Measures (Not included in turnkey cost above)

Add Measure: New Distech Controls BMS System with Web-Based Interface

Install new Distech Controls integrating new units and replacing the Trane zone controllers and thermostats with new Distech controllers and thermostats.

Cost: \$32,942

BID FORM

NAME OF BIDDER: EMCOR Services, Mesa Energy Systems, Inc.

The undersigned, hereby declare that we have carefully examined the location of the proposed Work, and have read and examined the Contract Documents, including all plans, specifications, and all addenda, if any, for the following Project:

Pacific View Charter School

We hereby propose to furnish all labor, materials, equipment, tools, transportation, and services, and to discharge all duties and obligations necessary and required to perform and complete the Project for the following **TOTAL BID PRICE:**

BASE BID	BID PRICE (IN WRITTEN FORM) Ninety-Three Thousand Six Hundred and Six	BID PRICE (IN NUMBERS) \$93,606
TOTAL BID PRICE	One Hundred Twenty Six Thousand Five Hundred Forty-Eight	\$126,548

In case of discrepancy between the written price and the numerical price, the written price shall prevail.

Please place initial beside document to verify receipt list below:

- WORKER'S COMPENSATION CERTIFICATE**
- INFORMATION ABOUT BIDDER**
- VERIFICATION AND EXECUTION**
- FINGERPRINT REQUIREMENTS**
- FINGERPRINT REQUIREMENTS (SUBCONTRACTORS - 1 for each Sub-Contractor)**
- DRUGFREE WORKPLACE CERTIFICATION**

**CONTRACTOR'S CERTIFICATE REGARDING
WORKERS' COMPENSATION**

I am aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this Contract.

Name of Bidder EMCOR Services, Mesa Energy Systems, Inc.

Signature 

Name Robert A. Lake

Title President

Dated March 7, 2018

A. INFORMATION ABOUT BIDDER

****Indicate not applicable ("N/A") where appropriate.****

1.0 Name of Bidder: EMCOR Services, Mesa Energy Systems, Inc.

2.0 Type, if Entity: Corporation

3.0 Bidder Address: 2 Cromwell

Irvine, CA 92618

Contractor's License Number 611215

PWC Registration Number 100002425

949.460.8833

949.460.0460

Facsimile Number

Telephone Number

4.0 How many years has Bidder's organization been in business as a Contractor?

33

5.0 How many years has Bidder's organization been in business under its present name? 33

5.1 Under what other or former names has Bidder's organization operated?: _____

6.0 List Trade References:

Travelers Bond & Financial Products

Hartford, CT 06183

Phone: 732.321.5600


INFORMATION REQUIRED OF BIDDERS

B. VERIFICATION AND EXECUTION

These Bid Forms shall be executed only by a duly authorized official of the Bidder:

I declare under penalty of perjury under the laws of the State of California that the foregoing information is true and correct:

Name of Bidder EMCOR Services, Mesa Energy Systems, Inc.

Signature 

Name Robert A. Lake

Title President

Dated March 7, 2015

CONTRACTOR & SUBCONTRACTOR FINGERPRINTING REQUIREMENTS

CONTRACTOR CERTIFICATION

With respect to the Contract dated TBD 2018 by and between Pacific View Charter School ("School") and Mesa Energy Services, Inc. ("Contractor"), Contractor hereby certifies to the School's governing board that it has completed the criminal background check requirements of Education Code Section 45125.1 and that none of its employees that may come in contact with School's pupils have been convicted of a violent felony listed in Penal Code section 667.5(c) or a serious felony listed in Penal Code section 1192.7(c).


Contractor's Representative

3-7-2018
Date

CONTRACTOR EXEMPTION

Consistent with the options outlined in Education Code sections 45125.1 and 45125.2, which the School has elected to use for purposes of this contract, the Pacific View Charter School ("School") has determined that _____ ("Contractor") is exempt from the criminal background check certification requirements for the Contract dated _____, 20__ by and between the School and Contractor ("Contract") because:

The Contractor's employees will have limited contact with School students during the course of the Contract;

Emergency or exceptional circumstances exist; or

With respect to contractors constructing, reconstructing, rehabilitating or repairing a school facility, as provided in Section 45125.2, the Contractor has agreed to ensure the safety of pupils at the school facility by the following method(s) specified in Section 45125.2:

School Official

Date

CONTRACTOR & SUBCONTRACTOR FINGERPRINTING REQUIREMENTS

SUBCONTRACTOR'S CERTIFICATION

The Pacific View Charter School ("School") entered into a Contract for services with Mesa Energy Systems, Inc. ("Contractor") on or about 780, 2018 ("Contract"). This certification is submitted by TBO, a subcontractor to the Contractor for purposes of that Contract ("Subcontractor"). Subcontractor hereby certifies to the School's governing board that it has completed the criminal background check requirements of Education Code section 45125.1 and that none of its employees that may come in contact with School pupils have been convicted of a violent felony listed in Penal Code section 667.5(c) or a serious felony listed in Penal Code section 1192.7(c).

[Signature]
Subcontractor's Representative

3-7-2018
Date

SUBCONTRACTOR'S EXEMPTION

The Pacific View Charter School ("School") entered into a Contract for services with _____ ("Contractor") on or about _____, 20____ ("Contract"). Consistent with the options outlined in Education Code sections 45125.1 and 45125.2, which the School has elected to use for purposes of this contract, the School has determined that _____, a subcontractor to the Contractor for purposes of that Contract ("Subcontractor"), is exempt from the criminal background check certification requirements for the Contract because:

The Subcontractor's employees will have limited contact with School students during the course of the Contract;

Emergency or exceptional circumstances exist; or

With respect to contractors constructing, reconstructing, rehabilitating or repairing a school facility, as provided in Section 45125.2, the Contractor and/or Subcontractor have agreed to ensure the safety of pupils at the school facility by the following method(s) specified in Section 45125.2: _____.

School Official

Date

DRUG-FREE WORKPLACE CERTIFICATION

This Drug-Free Workplace Certification form is part of the Contract made by and between the **Pacific View Charter School** (hereinafter referred to as the "School") and EMCOR Services, Mesa Energy Systems, Inc.

(hereinafter referred to as the "Contractor") for the Pacific View Charter School Project (hereinafter referred to as the "Project"). This form is required from all successful bidders pursuant to the Drug-Free Workplace Act of 1990 (Government Code Section 8350 et seq.) The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract or grant for procurement of any property or service from any State agency must certify that it will provide a drug-free workplace by doing certain specified acts. In addition, the Act provides that each contract or grant awarded by a State agency may be subject to suspension of payments or termination, and the contractor or grantee may be subject to debarment from future contracting, if the contracting agency determines that specified acts have occurred.

Pursuant to Government Code Section 8355, every person or organization awarded a contract or grant from a State agency shall certify that it will provide a drug-free workplace by doing all of the following

A. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in their workplace and specifying actions which will be taken against employees for violations of the prohibition;

B. Establishing a drug-free awareness program to inform employees about all of the following:

1. The dangers of drug abuse in the workplace;
2. The person's or organization's policy of maintaining a drug-free workplace;
3. The availability of drug counseling, rehabilitation and employee-assistance programs; and
4. The penalties that may be imposed upon employees for drug abuse violations.

C. Requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required by subdivision "A," and that, as a condition of employment on the contract or grant, the employee agrees to abide by the terms of the statement.

I, the undersigned, agree to fulfill the terms and requirements of the Drug-Free Workplace Act as it now exists or may hereinafter be amended. Particularly, I shall abide by Government Code Section 8355 when performing the Contract for the Project by:

A. Publishing a statement notifying employees concerning the prohibition of controlled substance at my workplace;

B. Establishing a drug-free awareness program; and

C. Requiring that each employee engaged in the performance of the contract be given a copy of the statement required by Section 8355(a) and agree to abide by the terms of that statement.

I also understand that if the School determines that I have either: (a) made a false certification herein; or (b) violated this certification by failing to carry out the requirements of Section 8355, the Contract awarded herein is subject to termination, suspension of payments, or both. I further understand that if I violate the terms of the Drug-Free Workplace Act of 1990, I may be subject to debarment in accordance with the requirements of the Act.

I acknowledge that I am aware of the provisions of Government Code Section 8350 et seq., and hereby certify that I will adhere to the requirements of the Drug-Free Workplace Act of 1990.

Executed on this 7th day of March,
20 15 at 2 Crownwell, Irvine, CA 92618.

EMCOR Services, Mesa Energy Systems, Inc.

Name of Contractor (Print or Type)

By

Signature

Print Name

Title

Robert A. Lake
President

Pacific View HVAC Bids and Budget

Pacific View Prop. 39 EEP Budget		LEA EEP Budget
HVAC	Replace (5) Packaged HP w/ SEER 15	\$ 75,000.00
Lighting -Interior	Line voltage retrofit of 1 lamp T8 Fluorescent fixtures to LED	\$ 135.00
Lighting -Interior	Line voltage retrofit of 2 lamp T8 Fluorescent fixtures to LED	\$ 3,542.40
Lighting -Interior	Line voltage retrofit of 3 lamp T8 Fluorescent fixtures to LED	\$ 11,696.40
Lighting -Interior	Replace compact fluorescent fixtures w/ LED fixtures	\$ 1,053.00
Lighting Exterior	Replace compact fluorescent fixtures w/ LED fixtures	\$ 1,566.00
Lighting Exterior	Replace HID fixtures w/ LED fixtures	\$ 1,485.00
Lighting -Interior	Install (13) Occupancy Sensors	\$ 2,145.00
Cool Roof	Install Cool Roof for 12,060 sf. R-6.4	\$ 78,390.00
Solar	18.70 kW PV System	\$68,162.68
Total		\$243,175.48

\$ 79,989.00 \$ (1,599.00)

Company	Equipment	Cost for 5 units	Cost for 4 units	Budget Over/Under (5 units)	Budget Over/Under (4 units)	SEER/EER Rating	Thermostats	Economizers	Disconnects	Permit	Prevailing wage	DIR Registration	Warranty
Comfort Demand Mechanical Services Inc	4 Ton HP (Trane) M: WSD48E3R0A	\$ 147,500.00	\$ 119,500.00	\$ (72,500.00)	\$ (44,500.00)	14 SEER/12 EER	Not Included	Included	Not included	Included	Included	Included	1 year labor warranty. Compressor has a 5 year warranty. Manufacturer parts will be covered by a 5 year warranty.
	5 Ton HP (Trane) M: WSC060E3R0A					14 SEER/11 EER							
	7.5 Ton HP (Trane) M: WSC090E3R0A					12 SEER/ 11.1 EER							
	10 Ton HP (Trane) M: WSC120E3R0A					13.1 SEER/11.2 EER							
	15 Ton HP (Trane) M: WSD180E3R0A					13.5 SEER/10.6 EER							
Jackson & Blanc	4 Ton HP (Carrier) M: 50HCQA05A2A	\$ 105,000.00	?	\$ (30,000.00)	?	15.8 SEER	Not Included	Included	Not Included	Included	Included	Included	1 Yr. replacement labor warranty and warranty to commence upon start up of equipment.
	5 Ton HP (Carrier) M: 50HCQA06A2A					15 SEER							
	7.5 Ton HP (Carrier) M: 50HCQD08A2A					12.1 EER/12.8 IEER							
	10 Ton HP (Carrier) M: 50HCQD12A2A					12.3 EER/13 IEER							
	15 Ton HP (Carrier) M: 50HCQS17A3A					10.8 EER/11.5 IEER							
EMCOR Services	4 Ton HP (Carrier)	\$ 126,548.00	\$ 64,133.00	\$ (51,548.00)	\$ 10,867.00	15.8 SEER	Included	Included	Included	Included	Included	Included	1 Yr. Labor & Materials from Date of Beneficial Use
	5 Ton HP (Carrier)					15 SEER							
	7.5 Ton HP (Carrier)					12.1 EER							
	10 Ton HP (Carrier)					12.3 EER							
	15 Ton HP (Carrier)					10.8 EER/12.8 IEER							
Q-Service Heating & AC inc.	4 Ton HP (Arcoaire) M: RHH048*0A0AA	\$ 79,292.00	N/A	\$ (4,292.00)	N/A	15.8 SEER/12.8 EER	Not Included	Included	Included	Included	Included	Included	1 yr. warranty on workmanship, and the equipment comes with a manufacturer limited 10 year warranty heat exchanger, 5 year on compressor, and 1 yr on parts.
	5 Ton HP (Arcoaire) M: RHH060*0A0AA					15 SEER/ 12.5 EER							
	7.5 Ton HP (Arcoaire) M: RHH090*0A0AA					12.1 EER							
	10 Ton HP (Arcoaire) M: RHH120*0A0AA					12.3 EER							
	15 Ton HP (Comfortmaker) M: RAH181*0A0AAA					12.2 EER							

Note: All replacement heat pump units shall be SEER 15 or better. If the equipment is rated in EER, not SEER, the systems shall be EER 12.2 or better.

7.4

PACIFIC VIEW CHARTER SCHOOL

BOARD OF TRUSTEES' MEETING

June 19, 2018

2018-19 WORKING/ADOPTED BUDGET

**Pacific View Charter School
2018/19 Proposed/Adopted Budget
Financial Summary – June 19, 2018**

Legislation outlined in Education Code Section 47604.33 requires Charter Schools to report their financial statements four times a year to their Sponsoring District, County Office of Education, and the California Department of Education. The financial reporting includes Budget Adoption, First Interim, Second Interim and Unaudited Actuals. The enclosed financial reports provide an update and detail of the School’s 2017/18 financial status, Proposed/Adopted 2018/19 Budget and projections for two subsequent fiscal years. The 2018/19 Budget will require the Board’s review and action.

The Proposed/Adopted 2018/19 Budget includes the following items:

- ✓ 2018/19 Proposed/Adopted Multi-year Projection and Assumptions
- ✓ 2018/19 Proposed/Adopted LCFF Spreadsheets
- ✓ 2018/19 School Services of California Dart Board
- ✓ 2018/19 Proposed/Adopted Charter School Certification

California Department of Education has created an LCFF calculator. LCFF base funding, supplemental and concentration grants are calculated using CDE’s model. SSC Dartboard reflects the per student formula. PVCS has projected conservative enrollment for the current and two following school years. Enrollment and other financial data will be updated at First Interim.

	K-3	4-6	7-8	9-12
LCFF Base Grants	8180	7520	7744	9206
Supplemental Grants	20%	20%	20%	20%
Concentration Grants	50%	50%	50%	50%

- **Special Education:** Administration submitted an application and has been accepted as a member of El Dorado Charter Selpa. Special Education compliance shall be solely the responsibility of Pacific View Charter School and the school shall be its own local educational agency (LEA) and operate separately from the Oceanside Unified School District. El Dorado Charter Selpa shall be providing Special Education program support and maximizing special education fiscal resources.

Proposed/Adopted Budget Enrollment and Average Daily Attendance (A.D.A.)

	2017/18	2018/19	2019/20	2020/21
Enrollment	492	542	557	572
A.D.A.	*625.67	596.93	614.85	634.92
A.D.A. Ratio	1.11%	1.11%	1.11%	1.11%

*2017-18 LCFF Calculation is based on 1st Interim. Actual funding occurs at 2nd Interim.

Pacific View Charter School
2018/19 Proposed/Adopted Budget
Financial Summary – June 19, 2018

The enclosed reports provide updated, detailed financial information for our 2018/19 budget and projections for the subsequent two fiscal years. Following are the major highlights of the 2018/19 budget which form the foundation for the Executive Director's Goals and the School's Mission.

1. Growth holding for three (3) Educational Specialist Teachers
2. Growth holding for three (3) Educational Specialist Instructional Aides
3. Growth holding for teacher in Moreno Valley & Oceanside
4. Growth holding for Instructional Aide
5. Growth holding for Receptionist -Oceanside
6. Increase in Instructional Aide hours
7. Implement family counseling services for Moreno Valley site
8. Purchase of 350 additional student computers
9. Identify and support unduplicated count students

**PACIFIC VIEW CHARTER SCHOOL
MULTI-YEAR PROJECTION
2018-2021 Proposed/Adopted Budget**

ENTERPRISE FUND		2017-18 Estimated Actuals Budget	2018-19 Proposed Adopted Budget	2019-20 Projected Budget	2020-21 Projected Budget
A. REVENUES					
1) Revenue Limit Sources	8010-8099	5,532,134	6,056,712	6,376,024	6,812,321
2) Other Federal Revenues	8100-8299	0	0	0	0
3) Other State Revenues	8300-8599	217,120	576,262	585,818	589,277
4) Other Local Revenues	8600-8799	25,679	13,000	13,000	13,000
5) TOTAL REVENUES		5,774,933	6,645,974	6,974,842	7,414,598
B. EXPENDITURES					
1) Certificated Salaries	1000-1999	2,534,736	2,894,830	2,981,675	3,071,125
2) Classified Salaries	2000-2999	657,089	772,589	795,767	819,640
3) Employee Fringes	3000-3999	943,439	1,254,505	1,364,816	1,457,681
4) Books, Supplies, Non-Capital Equip	4000-4999	318,244	211,602	217,950	224,489
5) Services, Other Operating Exp	5000-5999	1,472,711	1,467,217	1,511,234	1,556,571
7) Other Outgo	7100-7299	0	0	0	0
8) Direct Support/Indirect Costs	7300-7399	0	0	0	0
9) TOTAL EXPENDITURES		5,926,219	6,600,743	6,871,442	7,129,505
C. EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES BEFORE OTHER FINANCING SOURCES & USES		-151,286	45,231	103,401	285,093
D. Other Financing Sources/Uses					
1) Interfund Transfers In - 8919					
2) Interfund Transfers Out - 7619					
E. Net Increase(Decrease) in Fund Balance		-151,286	45,231	103,401	285,093
F. FUND BALANCE, RESERVES					
1) Fund 62/62-01 Beginning Balance/July 1		4,137,174	3,985,888	4,031,119	4,134,520
2) Ending Balance		3,985,888	4,031,119	4,134,520	4,419,612
Components of Fund Balance					
Restricted for Econ Uncert.		177,787	198,022	206,143	213,885
Restricted for Special Purposes		3,808,101	3,833,097	3,928,377	4,205,727
Undesignated		0	0	0	0
Total Components of Fund Balance		3,985,888	4,031,119	4,134,520	4,419,612
SPECIAL RESERVE FUND FOR CAPITAL OUTLAY PROJECTS		169,248	169,248	169,248	169,248

**PACIFIC VIEW CHARTER SCHOOL
MULTI-YEAR PROJECTION
2018-2021 Proposed/Adopted Budget**

		2017-18 Estimated Actuals	2018-19 Proposed Adopted	2019-20 Projected Budget	2020-21 Projected Budget
Designated for Economic Uncertainty		177,787	198,022	206,143	213,885
	TOTAL	177,787	198,022	206,143	213,885
Revolving Cash Reserve		200	200	200	200
Deferred Maintenance Reserve		50,000	50,000	50,000	50,000
Facilities/Architect		50,000	50,000	50,000	50,000
Facilities Reserve		217,000	217,000	217,000	217,000
Land/Bldg/Deprec/Growth		3,269,189	3,294,185	3,389,465	3,666,815
Long Term Debt Reserve (Building)		217,571	217,571	217,571	217,571
Long Term Debt Reserve (Automobile)		4,141	4,141	4,141	4,141
	TOTAL	3,808,101	3,833,097	3,928,377	4,205,727
Undesignated	9790-000	0	(0)	(0)	0
	TOTAL	0	(0)	(0)	0
	TOTAL RESERVES	3,985,888	4,031,119	4,134,520	4,419,612

**PACIFIC VIEW CHARTER SCHOOL
MULTI-YEAR PROJECTION
2018-2021 Proposed/Adopted Budget**

	2018-19 PROJECTED	2019-20 PROJECTED	2020-21 PROJECTED
<u>REVENUE</u>			
1. COLA	2.71%	2.57%	2.67%
2. LOTTERY	\$146.00	\$146.00	\$146.00
3. ENROLLMENT ESTIMATES			
Totals	542	557	572
4. ENROLLMENT INCREASE(DECREASE)	40	15	15
5. REVENUE LIMIT ADA	601.62	618.27	634.92
<u>EXPENDITURES</u>			
1. FRINGE BENEFIT RATES			
STRS State Teachers Retirement System	16.28%	18.130%	19.10%
PERS Public Employee Retirement System	18.062%	20.800%	23.500%
Social Security	6.20%	6.20%	6.20%
Medicare	1.45%	1.45%	1.45%
SUI State Unemployment Insurance/ 09/10 .30%	1.10%	1.10%	1.10%
Workers Compensation/09/10 1.80%	1.89%	1.89%	1.89%
Health Insurance cost per year	\$ 420,963	\$ 433,592	\$ 446,600
Books and Supplies/Other Operating Services	5%	3%	3%

**PACIFIC VIEW CHARTER SCHOOL
MULTI-YEAR PROJECTION
2018-2021 Proposed/Adopted Budget**

REVENUES	2018-19	2019-20	2020-21
<i>Total Student Enrollment</i>	542	557	572
<i>Total Student ADA</i>	596.93	614.85	634.92
Student ADA at 111% - MS - Grade K-3	16.30	16.79	17.30
Student ADA at 111% - MS - Grade 4-6	46.27	47.66	49.09
Student ADA at 111% - MS - Grade 7-8	86.88	89.49	92.18
Student ADA at 111% - HS - Grade 9-12	447.48	460.91	475.64
Revenue Limit Sources			
0000-000-8011 LCFF Base Funding	2,643,540	2,915,797	3,217,558
0000-000-8011-001 LCFF Base Funding Prior Year	0	0	0
0000-500-8011 Supplemental & Concentration Grants	783,128	804,379	911,039
0000-500-8011-001 Supplemental & Concentratio Grants PY	0	0	0
1400-000-8012 Education Protection Account	859,526	885,330	913,206
1400-000-8012-001 Education Protection Account Prior Year	0	0	0
0000-000-8096 In lieu of Property Taxes-Included in Prin Appor	1,770,518	1,770,518	1,770,518
0000-000-8096-001 In lieu of Property Tax Prior Year	0	0	0
TOTALS	6,056,712	6,376,024	6,812,321
Other State Revenues			
0000-000-8550 Mandated Costs	40,000	40,000	40,000
1100-000-8560 State Lottery - CY Unrestricted	84,224	86,751	89,353
1100-000-8560-001 State Lottery - Prior Year Unrestricted	0	0	0
6300-000-8560 State Lottery - CY Restricted	27,690	28,521	29,376
6500000-8590 Special Education	345,622	345,622	345,622
Various-8590 Star Testing Revenue	1,800	1,800	1,800
6230000-8590 Prop 39	76,926	83,125	83,125
TOTALS	576,262	585,818	589,277
Other Local Revenues			
0000-000-8660 Interest	8,000	8,000	8,000
0000-000-8699 All other local revenue	5,000	5,000	5,000
0000-000-8699 Microsoft Voucher Funds	0	0	0
TOTALS	13,000	13,000	13,000
TOTAL REVENUE	\$6,645,974	\$6,974,842	\$7,414,598

**PACIFIC VIEW CHARTER SCHOOL
MULTI-YEAR PROJECTION
2018-2021 Proposed/Adopted Budget**

EXPENDITURES		2018-19	2019-20	2020-21
		21.9	21.9	21.9
<i>Certificated Salaries</i>				
1000-1999		2,894,830	2,981,675	3,071,125
Teacher salaries based on 21.9 FTE				
Admin Salaries 3.7FTE				
<i>Classified Salaries</i>				
2000-2999		772,589	795,767	819,640
Support staff & office salaries 7.5 FTE				
Admin Salaries 1.0 FTE				
<i>Employee Fringes</i>				
3111/3211 STRS		464,361	540,578	586,585
3212 PERS		139,545	165,519	192,615
3311/3312 Social Security		52,350	49,338	50,818
3321/3322 Medicare		53,335	54,773	56,416
3401/3402 Health & Welfare Benefits		420,963	433,592	446,600
3501/3502 Unemployment Insurance		48,178	49,623	51,112
3601/3602 Workman's Compensation Ins.		75,773	71,394	73,535
TOTALS		1,254,505	1,364,816	1,457,681
<i>Books and Supplies</i>				
4000-4999		211,602	217,950	224,489
<i>Services, Other Operating Expense</i>				
5000-5999		1,467,217	1,511,234	1,556,571
conferences, mileage, dues & memberships, insurance, gas & electricity, irrigation, trash, pest control, contracted				
cleaning services, leases, maintenance agreements, grounds & repairs, equipment leases, bank expenses,				
contracted services, bottled water, employment services, security services, charter buses, software licensing,				
print shop services, SDCOE systems, oversight fee, payroll services, legal expenses, advertising, telephones &				
cell phones, postage, internet costs				
<i>Other Outgo</i>		0	0	0
<i>Direct Support/Indirect Costs</i>		0	0	0
TOTAL EXPENDITURES		\$6,600,743	\$6,871,442	\$7,129,505

Summary of Funding						
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Target Components:						
Base Grant	5,247,763	5,156,754	5,448,224	5,770,245	6,146,656	6,537,765
Grade Span Adjustment	119,242	116,830	123,421	131,037	139,389	148,126
Supplemental Grant	653,915	638,104	667,594	723,969	780,224	823,834
Concentration Grant	158,863	145,024	136,785	187,070	221,898	220,968
Add-ons	-	-	-	-	-	-
Total Target	6,179,783	6,056,712	6,376,024	6,812,321	7,288,167	7,730,693
Transition Components:						
Target	\$ 6,179,783	\$ 6,056,712	\$ 6,376,024	\$ 6,812,321	\$ 7,288,167	\$ 7,730,693
Funded Based on Target Formula <i>(based on prior)</i>	FALSE	FALSE	TRUE	TRUE	TRUE	TRUE
Floor	5,802,370	5,699,348	6,237,973	6,433,797	6,626,386	6,824,741
<i>Remaining Need after Gap (informational only)</i>	206,936	-	-	-	-	-
Current Year Gap Funding	170,477	357,364	-	-	-	-
Miscellaneous Adjustments	-	-	-	-	-	-
Economic Recovery Target	-	-	-	-	-	-
Additional State Aid	-	-	-	-	-	-
Total LCFF Entitlement	\$ 5,972,847	\$ 6,056,712	\$ 6,376,024	\$ 6,812,321	\$ 7,288,167	\$ 7,730,693

Components of LCFF By Object Code						
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
8011 - State Aid	\$ 3,314,544	\$ 3,426,668	\$ 3,720,176	\$ 4,128,597	\$ 4,577,027	\$ 4,991,316
8011 - Fair Share	-	-	-	-	-	-
8311 & 8590 - Categoricals	-	-	-	-	-	-
EPA (for LCFF Calculation purposes)	900,909	859,526	885,330	913,206	940,622	968,859
<i>Local Revenue Sources:</i>						
8021 to 8089 - Property Taxes	-	-	-	-	-	-
8096 - In-Lieu of Property Taxes	1,757,394	1,770,518	1,770,518	1,770,518	1,770,518	1,770,518
<i>Property Taxes net of in-lieu</i>	-	-	-	-	-	-
TOTAL FUNDING	\$ 5,972,847	\$ 6,056,712	\$ 6,376,024	\$ 6,812,321	\$ 7,288,167	\$ 7,730,693
<i>Basic Aid Status</i>	-	-	-	-	-	-
<i>Less: Excess Taxes</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
<i>Less: EPA in Excess to LCFF Funding</i>	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Phase-in Entitlement	\$ 5,972,847	\$ 6,056,712	\$ 6,376,024	\$ 6,812,321	\$ 7,288,167	\$ 7,730,693
<i>8012 - EPA Receipts (for budget & cashflow)</i>	\$ 905,638	\$ 859,526	\$ 885,330	\$ 913,206	\$ 940,622	\$ 968,859

Summary of Student Population						
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Unduplicated Pupil Population						
Agency Unduplicated Pupil Count	282.00	320.00	350.00	355.00	360.00	370.00
COE Unduplicated Pupil Count	-	-	-	-	-	-
Total Unduplicated pupil Count	282.00	320.00	350.00	355.00	360.00	370.00
Rolling %, Supplemental Grant	60.9200%	60.5000%	59.9100%	61.3400%	62.0600%	61.6100%
Rolling %, Concentration Grant	60.9200%	60.5000%	59.9100%	61.3400%	62.0600%	61.6100%
FUNDED ADA						
<i>Adjusted Base Grant ADA</i>	<i>Current Year</i>	<i>Current Year</i>	<i>Current Year</i>	<i>Current Year</i>	<i>Current Year</i>	<i>Current Year</i>
Grades TK-3	17.07	16.30	16.79	17.30	17.82	18.36
Grades 4-6	48.49	46.27	47.66	49.09	50.57	52.09
Grades 7-8	91.06	86.88	89.49	92.18	94.95	97.80
Grades 9-12	469.05	447.48	460.91	475.64	489.91	504.61
Total Adjusted Base Grant ADA	625.67	596.93	614.85	634.21	653.25	672.86
<i>Necessary Small School ADA</i>	<i>Current year</i>	<i>Current year</i>	<i>Current year</i>	<i>Current year</i>	<i>Current year</i>	<i>Current year</i>
Grades TK-3	-	-	-	-	-	-
Grades 4-6	-	-	-	-	-	-
Grades 7-8	-	-	-	-	-	-
Grades 9-12	-	-	-	-	-	-
Total Necessary Small School ADA	-	-	-	-	-	-
Total Funded ADA	625.67	596.93	614.85	634.21	653.25	672.86
ACTUAL ADA (Current Year Only)						
Grades TK-3	17.07	16.30	16.79	17.30	17.82	18.36
Grades 4-6	48.49	46.27	47.66	49.09	50.57	52.09
Grades 7-8	91.06	86.88	89.49	92.18	94.95	97.80
Grades 9-12	469.05	447.48	460.91	475.64	489.91	504.61
Total Actual ADA	625.67	596.93	614.85	634.21	653.25	672.86
<i>Funded Difference (Funded ADA less Actual ADA)</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>

LCAP Percentage to Increase or Improve Services						
	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Current year estimated supplemental and concer	\$ 812,778	\$ 783,128	\$ 804,379	\$ 911,039	\$ 1,002,122	\$ 1,044,802
Current year Percentage to Increase or Improve	15.75%	14.85%	14.44%	15.44%	15.94%	15.63%

SSC School District and Charter School Financial Projection Dashboard 2018-19 May Revision

This version of SSC's Financial Projection Dashboard is based on the 2018-19 May Revision. We have updated the Local Control Funding Formula (LCFF) factors. We have also updated the cost-of-living adjustment (COLA), Consumer Price Index (CPI), and ten-year T-bill planning factors per the latest economic forecasts. We rely on various state agencies and outside sources in developing these factors, but we assume responsibility for them with the understanding that they are general guidelines.

LCFF ENTITLEMENT FACTORS				
Entitlement Factors per ADA	K-3	4-6	7-8	9-12
2017-18 Initial Grants	\$7,193	\$7,301	\$7,518	\$8,712
COLA at 3.00%	\$216	\$219	\$226	\$261
2018-19 Base Grants	\$7,409	\$7,520	\$7,744	\$8,973

Entitlement Factors per ADA	K-3	4-6	7-8	9-12
2018-19 Base Grants	\$7,409	\$7,520	\$7,744	\$8,973
Grade Span Adjustment Factors	10.4%	-	-	2.6%
Grade Span Adjustment Amounts	\$771	-	-	\$233
2018-19 Adjusted Base Grants	\$8,180	\$7,520	\$7,744	\$9,206
Supplemental Grants (% Adj. Base)	20%	20%	20%	20%
Concentration Grants	50%	50%	50%	50%
Concentration Grant Threshold	55%	55%	55%	55%

LCFF DARTBOARD FACTORS					
Factors	2017-18	2018-19	2019-20	2020-21	2021-22
SSC Gap Funding Percentage	45.17%	100.00%	-	-	-
Department of Finance Gap Funding Percentage	45.17%	100.00%	-	-	-
Gap Funding Percentage (as of May Revise)	43.97%	100.00%	-	-	-
COLA ¹	1.56%	3.00% ²	2.57%	2.67%	2.90%

PLANNING FACTORS					
Factors	2017-18	2018-19	2019-20	2020-21	2021-22
COLA on state and local share ³	1.56%	2.71%	2.57%	2.67%	2.90%
California CPI	3.37%	3.58%	3.36%	3.23%	2.94%
California Lottery	Unrestricted per ADA \$146	\$146	\$146	\$146	\$146
	Restricted per ADA \$48	\$48	\$48	\$48	\$48
Mandate Block Grant (District)	Grades K-8 per ADA \$30.34	\$31.16	\$31.16	\$31.16	\$31.16
	Grades 9-12 per ADA \$58.25	\$59.83	\$59.83	\$59.83	\$59.83
Mandate Block Grant (Charter)	Grades K-8 per ADA \$15.90	\$16.33	\$16.33	\$16.33	\$16.33
	Grades 9-12 per ADA \$44.04	\$45.23	\$45.23	\$45.23	\$45.23
One-Time Discretionary Funds per ADA	\$147	\$344	-	-	-
Interest Rate for Ten-Year Treasuries	2.59%	3.15%	3.40%	3.50%	3.40%
CalPERS Employer Rate (projected) ⁴	15.531%	18.062%	20.8%	23.5%	24.6%
CalSTRS Employer Rate (statutory)	14.43%	16.28%	18.13%	19.10%	19.10%

RESERVES	
State Reserve Requirement	District ADA Range
The greater of 5% or \$67,000	0 to 300
The greater of 4% or \$67,000	301 to 1,000
3%	1,001 to 30,000
2%	30,001 to 400,000
1%	400,001 and higher

¹Target for LCFF is projected to be achieved in the 2018-19 fiscal year, therefore, any growth in LCFF revenues in future years will be attributable to the application of the COLA to the base grant

²Includes statutory COLA of 2.71% plus an additional 0.29% represented by an additional \$166 million appropriated above LCFF targets

³Includes Special Education, Child Nutrition, Foster Youth, American Indian Education Centers/American Indian Early Childhood Education, and Mandate Block Grant

⁴Rate is final for 2017-18 and 2018-19 fiscal years

Pacific View Charter School
Working Adopted Budget
Charter Number 247
CDE Number 37-73569
Fiscal Year 2018/2019
Charter School Certification

2018-19 Working Adopted Budget is hereby submitted to the chartering authority and the county superintendent of schools.

Signed: _____
Charter School Official

Date: _____

Printed Name: Gina Campbell, Executive Director

For additional information on the Second Interim Report, please contact:

Kira Fox, Director of Central Office & Finance
760-757-0161 Ext.105
kfox@pacificview.org

7.5

Independent Contractor Agreement 2018/19 School Year

Contract Date: July 1, 2018

This Agreement is entered into between the Pacific View Charter School hereinafter called the “**The Charter School**” and California School Business Consultants hereinafter called the “**Contractor**”.

WHEREAS, The Charter School is authorized to contract with and employ any persons for the furnishing of special services and advice in financial, economic, accounting, engineering, legal or administrative matters, if such persons are specially trained, experienced and competent to perform the special services required; and

WHEREAS, The Charter School is in need of such special services and advice, and

WHEREAS, Contractor is specially trained and experienced and competent to perform the special services required by the Charter School, and such services are needed on a limited basis;

NOW THEREFORE, the parties agree as follows:

1. Services to be provided by Contractor:
 - Review and discuss Year End Closing documentation on revenue, expense and budget on a as needed basis
 - Consult during Auditor’s visit & preparation as determined necessary by the Director of Central Office & Finance
 - Perform budget and financial analysis on a as needed basis
 - Assist with Personnel documentation related to Job descriptions, salary surveys as needed
 - Assist with Administrative planning, site related issues and financing options as determined necessary by the Director of Central Office & Finance and the Executive Director
 - Review staff prepared documents for Local, State and Federal budget and assists in monitoring budget on a as needed basis
 - Review staff transaction and budget adjustments on a as needed basis
 - Answer questions and discuss options via email, telephone, virtually or in person on a as needed basis

2. Term of Agreement:
 1. Contractor shall commence providing services under this Agreement on July 1, 2018 through June 30, 2019 and services may be discontinued by either party to this agreement.
 2. It shall be expressly understood by Contractor that time is of the essence per this Agreement and the Charter School may terminate this Agreement in the event of an unexcused delay in Contractor’s performance hereunder.

Independent Contractor Agreement 2018/19 School Year

3. Contractor has the right to perform services for other agencies and/or schools during the term of this agreement.
4. The Charter School shall not obtain workers' compensation insurance on behalf of the Contractor. Contractor shall pay all income taxes and FICA (Social Security and Medicare taxes) incurred while performing services under this Agreement.

3. Compensation:

A. The Charter School agrees to pay Contractor for services rendered pursuant to this Agreement on an hourly basis at a rate of \$113.18 on an as needed basis. The annual contract is not to exceed \$17,995.62 (Seventeen Thousand Nine Hundred Ninety-Five Dollars and 62/100). Invoice shall be submitted bi-monthly and contain a breakdown of offsite services provided by Contractor and time onsite training specified in hours as relevant in section 1. Onsite and offsite PVCS Service to be provided by Contract section of this agreement.

B. The Charter School agrees to pay Contractor's hourly rate for services rendered onsite and by other forms of communication. Cost of transportation and lodging related to onsite visit shall be paid for by the Charter School.

C. The Charter School shall pay the Contractor according to the following terms and conditions: Upon presentation of a monthly invoice, payment will be made 30 working days after completion of service.

4. Termination of Agreement:

The Charter School may terminate this Agreement and will be relieved of all obligations under this Agreement should Contractor fail to perform any of the terms and conditions hereof at the time and places set forth herein. In the event of such termination, Contractor shall be paid the reasonable value of the services rendered up to the date of such terminations, less any payments theretofore made, as determined by the Charter School, and the Contractor hereby expressly waives any and all claims for damages or compensation arising under this Agreement in the event of such terminations.

5. Status of Contractor:

It is expressly understood that at all times while rendering the services described herein and in complying with any terms and conditions of this Agreement, Contractor is acting as an independent contractor and not as an officer, agent, or employee of the Charter School.

**Independent Contractor Agreement
2018/19 School Year**

6. Compliance with Law:

The Contractor shall be subject to and shall comply with all Federal, State, and local laws and regulations applicable with respect to its performance under this Agreement including, but not limited to: licensing, employment and purchasing practices, and wages, hours and conditions of employment, including nondiscrimination.

7. Alterations or Variance:

No alterations to this Agreement or variance from the provisions hereof shall be valid unless made in writing and executed by both of the parties hereto.

IN WITNESS WHEREOF the parties hereto have executed this Agreement as of the date hereinabove first written.

The Charter School

Contractor

Signature

Signature

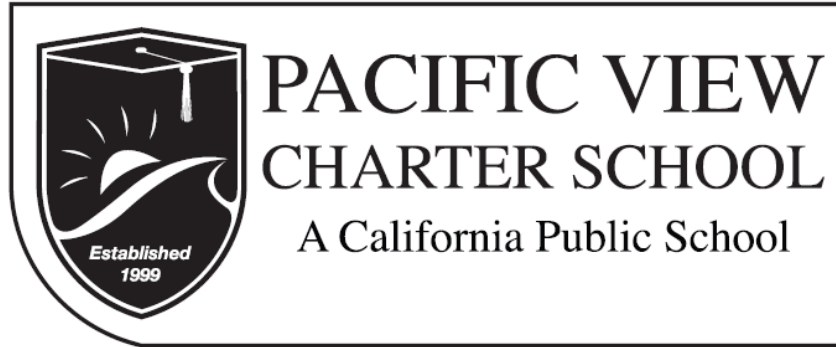
Date

Date

Pacific View Charter School
3670 Ocean Ranch Blvd.
Oceanside, California 92056
760-757-0161

CSBC
1310 La Salle Court
Vista, California 92081
760-450-4179

7.6



PACIFIC VIEW CHARTER SCHOOL INJURY & ILLNESS PREVENTION PROGRAM

Pacific View Charter School is committed to providing and maintaining a safe and healthful work environment. To achieve this, an Injury & Illness Prevention Program (IIPP) has been developed. We also believe that safety is every employee's responsibility and expect all employees to use safe work practices and report any unsafe condition that they observe. Supervisors shall consistently promote safety and shall correct unsafe conditions and/or work practices through education, training and enforcement.

GENERAL INFORMATION

Name of facility: Pacific View Charter School
Address: 3670 Ocean Ranch Blvd., Oceanside, CA 92056
Phone: (760) 757-0161

DESIGNATED PERSON(S)

Lori Bentley / Kira Fox

EMPLOYEE COMPLIANCE

All employees are responsible for complying with safe and healthful work practices. Our system of ensuring that all employees comply includes:

- Informing employees of the provisions of our IIPP.
- Evaluating the safety performance of all employees.
- Employee recognition.
- Providing retraining to employees whose safety performance is deficient.

COMMUNICATIONS

All managers and supervisors are responsible for communicating with employees about matters related to occupational safety and health. We encourage all employees to report hazardous acts and conditions without fear of reprisal. We accomplish this through the following:

- Reviewing the IIPP, safety and health policies and procedures, etc., during new employee orientation.
- Training programs.
- Safety meetings.
- Posted and/or distributed safety literature.
- A system for employees to anonymously notify management of hazards.

HAZARD IDENTIFICATION

Periodic inspections to identify hazards will be completed in the following areas:

- | | |
|--------------------------|----------------------|
| ▪ Administrative Offices | ▪ Computer Lab |
| ▪ Biology Lab | ▪ Student Study Hall |
| ▪ Classrooms | ▪ Warehouses |

Inspections are performed:

- When new substances, equipment, processes, etc., are introduced.
- When new or previously unidentified hazards are recognized.
- On-going on an Annual Basis

ACCIDENT INVESTIGATION

Occupational injuries and illnesses are to be investigated by the immediate supervisor as soon as possible after the incident. The purpose of the investigation is to determine the cause so that appropriate corrective action can be taken to prevent recurrence.

HAZARD CORRECTION

Unsafe or unhealthy acts or conditions will be addressed as soon as possible after receiving notification. Those hazards considered most severe will be dealt with first.

TRAINING & INSTRUCTION

All employees will be provided with safety and health training in general safe work practices and with respect to the hazards unique to their specific job assignment. Training will be provided:

- When the program is first established.
- To all new employees.
- To all employees given new job assignments for which training has not previously been received.
- Whenever new substances, procedures, processes, equipment, etc., are introduced and represent a new hazard.
- Whenever the employer is made aware of a new or previously unrecognized hazard.
- For supervisors to familiarize themselves with the hazards to which the employees under their immediate direction may be exposed.

This Injury and Illness Prevention Program (IIPP) has been reviewed and approved.

Gina Campbell, Executive Director
Signature and Title

Date



PACIFIC VIEW CHARTER SCHOOL INJURY & ILLNESS PREVENTION PROGRAM

Pacific View Charter School is committed to providing and maintaining a safe and healthful work environment. To achieve this, an Injury & Illness Prevention Program (IIPP) has been developed. We also believe that safety is every employee's responsibility and expect all employees to use safe work practices and report any unsafe condition that they observe. Supervisors shall consistently promote safety and shall correct unsafe conditions and/or work practices through education, training and enforcement.

GENERAL INFORMATION

Name of facility: Pacific View Charter School
Address: 22695 Alessandro Blvd., Moreno Valley, CA 92553
Phone: (951) 697-1990

DESIGNATED PERSON(S)

Jennifer Dean, Site Supervisor

EMPLOYEE COMPLIANCE

All employees are responsible for complying with safe and healthful work practices. Our system of ensuring that all employees comply includes:

- Informing employees of the provisions of our IIPP.
- Evaluating the safety performance of all employees.
- Employee recognition.
- Providing retraining to employees whose safety performance is deficient.

COMMUNICATIONS

All managers and supervisors are responsible for communicating with employees about matters related to occupational safety and health. We encourage all employees to report hazardous acts and conditions without fear of reprisal. We accomplish this through the following:

- Reviewing the IIPP, safety and health policies and procedures, etc., during new employee orientation.
- Training programs.
- Safety meetings.
- Posted and/or distributed safety literature.
- A system for employees to anonymously notify management of hazards.

HAZARD IDENTIFICATION

Periodic inspections to identify hazards will be completed in the following areas:

- Administrative Offices
- Classrooms
- Computer Lab
- Student Study Hall
- Storage Areas

Inspections are performed:

- When new substances, equipment, processes, etc., are introduced.
- When new or previously unidentified hazards are recognized.
- On-going on an Annual Basis

ACCIDENT INVESTIGATION

Occupational injuries and illnesses are to be investigated by the immediate supervisor as soon as possible after the incident. The purpose of the investigation is to determine the cause so that appropriate corrective action can be taken to prevent recurrence.

HAZARD CORRECTION

Unsafe or unhealthy acts or conditions will be addressed as soon as possible after receiving notification. Those hazards considered most severe will be dealt with first.

TRAINING & INSTRUCTION

All employees will be provided with safety and health training in general safe work practices and with respect to the hazards unique to their specific job assignment. Training will be provided:

- When the program is first established.
- To all new employees.
- To all employees given new job assignments for which training has not previously been received.
- Whenever new substances, procedures, processes, equipment, etc., are introduced and represent a new hazard.
- Whenever the employer is made aware of a new or previously unrecognized hazard.
- For supervisors to familiarize themselves with the hazards to which the employees under their immediate direction may be exposed.

This Injury and Illness Prevention Program (IIPP) has been reviewed and approved.

Gina Campbell, Executive Director
Signature and Title

Date

7.8

Pacific View Charter School

Students

Student Policy #22

Homeless Youth Education Policy

I. General Policy Statement:

Pacific View Charter School shall ensure that homeless children and youths shall have equal access to the same free, appropriate public education as provided to other children and youths.

II. Definitions:

“School of Origin” shall mean the school that a child or youth attended when permanently housed or the school in which the child or youth was last enrolled, including preschool. School of origin shall also include any designated receiving school for the next grade level for all feeder schools when a student completes the final grade level served by the school of origin.

“Homeless children and youths” shall mean any individuals who lack a fixed, regular, and adequate nighttime residence; and includes: (i) Children and youths who are sharing the housing of other persons due to loss of housing, economic hardship, or a similar reason; are living in motels, hotels, trailer parks, or camping grounds due to the lack of alternative adequate accommodations; are living in emergency or transitional shelters; or are abandoned in hospitals; (ii) Children and youths who have a primary nighttime residence that is a public or private place not designed for or ordinarily used as a regular sleeping accommodation for human beings; (iii) Children and youths who are living in cars, parks, public spaces, abandoned buildings, substandard housing, bus or train stations, or similar settings; and (iv) Migratory children who qualify as homeless because they are living in circumstances described in (i-iii).

“Unaccompanied youth” shall mean a homeless child or youth not in the physical custody of a parent or guardian

III. School Stability:

A. School Selection: Each school shall presume that keeping a homeless child or youth enrolled in the child’s or youth’s school of origin is in the child’s or youth’s best interest, except when doing so is contrary to the request of the child’s or youth’s parent or guardian or, in the case of an unaccompanied youth, the youth. To overcome the presumption that a child or youth should remain in his/her school of origin, the school shall consider student-centered factors including; the impact of mobility on achievement, education, health, and safety of homeless children and youth, giving priority to the request of the child’s or youth’s parent or guardian or, in the case of an unaccompanied youth, the youth. “This guidance document is advisory in nature but is binding on an agency until amended by such agency. A guidance document does not include internal procedural documents that only affect the internal operations of the agency and does not impose additional requirements or penalties on regulated parties or include confidential information or rules and regulations made in accordance with the Administrative Procedure Act. If you believe that this guidance document imposes additional requirements or penalties on regulated parties, you may request a review of the document.

B. Enrollment: Once the school is selected in accordance with the child's or youth's best interest, that child or youth shall be immediately enrolled even if the child or youth is unable to produce records normally required for enrollment including, but not limited to, previous academic records, immunization or other health records, proof of residency or has missed any application or enrollment deadlines during any period of homelessness.

C. Transportation: If the child or youth continues to attend his or her school of origin, transportation shall be provided promptly even if there is a dispute pending regarding which school is in the child's or youth's best interest to attend. Transportation will continue to be provided to and from the school of origin for the remainder of any academic year during which the child or youth becomes permanently housed.

IV Records

A. Any record ordinarily kept by the school, including immunization or medical records, academic records, birth certificates, guardianship records, and evaluations for special services or programs, regarding each homeless child or youth shall be maintained: A. Such that all records are available, in a timely fashion, when a child or youth enrolls in a new school or school district;

B. Any information about a homeless child's or youth's living situation shall be treated as a confidential student education record, and shall not be deemed to be directory information; and

C. In a manner consistent with the Federal Education Rights and Privacy Act.

V. Services:

Local Education Agency Liaison: Pacific View Charter School shall identify an appropriate staff person to be the Local Educational Liaison (LEL) for all homeless children and youth attending Pacific View Charter School. The LEL responsibilities shall include, but are not limited to:

A. Ensure homeless children and youth are identified through outreach and coordination activities including coordination with the San Diego County Office of Education Homeless Education Liaison, community, and school personnel responsible for education and related services to homeless children and youths;

B. Receive appropriate time and training in order to carry out the duties required by law and this policy;

C. Ensure homeless families and homeless children and youths are referred to health care, dental, mental health, substance abuse, housing and any other appropriate services;

D. Ensure that homeless children and youths:

i. Are enrolled in school which includes attending classes and participating fully in school activities;

ii. Have a full and equal opportunity to meet the same challenging State academic standards as other children and youths; "This guidance document is advisory in nature but is binding on an agency until amended by such agency. A guidance document does not include internal procedural documents that only affect the internal operations of the agency and does not impose additional requirements or penalties on regulated parties or include confidential information or rules and regulations made in accordance with the Administrative Procedure Act. If you believe that this guidance document imposes additional requirements or penalties on regulated parties, you may request a review of the document.

iii. Receive individualized counseling from counselors to prepare and improve their readiness for college, including college selection, application, financial aid, and on-campus supports.

iv. Unaccompanied youths are informed of their status as independent students under

the Higher Education Act of 1965 and may obtain assistance from the LEL to receive verification of such status for purposes of the Free Application for Federal Student Aid.

E. Ensure that public notice of the educational rights, and available transportation services, of the homeless children and youths is disseminated in locations frequented by parents or guardians of such youths, and unaccompanied homeless youths, including schools, shelters, public libraries, and soup kitchens, in a manner and form that is easily understandable.

F. Ensure the dispute resolution process identified below is carried out in accordance with the law and district policy.

VI. Dispute Resolution:

A. The dispute procedure must be available for disputes over eligibility, as well as school selection or enrollment.

B. In the event of a dispute regarding where a child or youth should enroll, the child or youth shall be immediately enrolled in the school in which enrollment is sought pending final resolution of the dispute, including all available appeals. The district shall immediately provide the child's parent or guardian or, in the case of an unaccompanied youth, the youth a written explanation of the decision made regarding the school selection including the right to appeal such decision. Said writing shall be provided in a manner and form understandable to such parent, guardian, or unaccompanied youth and also include the LEL contact information. The LEL shall carry out the dispute resolution process within 30 calendar days from the date of said writing pursuant to 92 Nebraska Administrative Code 19-005.02.

C. Appeals: Any parent, guardian or other person having legal or actual charge of a homeless child or youth that is dissatisfied with the decision of a school district after the dispute resolution process may file an appeal with the Commissioner within thirty calendar days of receipt of the decision

Board Approved:

Amended:

8.1

DRAFT

**PACIFIC VIEW CHARTER SCHOOL
2018-19 CERTIFICATED SALARY SCHEDULE
PSYCHOLOGIST**

192 Days

POSITION	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
Psychologist*	87,020	90,501	94,121	97,886	101,801	105,873	110,108
<u>Stipends for advanced degrees</u>							
Masters	2,000						
Doctorate	3,500						
<u>*Stipend for Longevity</u>							
8th Year	5%						
13th Year	5%						
18th Year	3%						

Board Approved: **06/19/2018**

8.2

DRAFT

PACIFIC VIEW CHARTER SCHOOL 2018-19 CERTIFICATED SALARY SCHEDULE SUPERVISORY TEACHER ~ GRADES 9 -12

Work Year
223 Days

	I				II				III				IV		
	B.A.	Per Diem	Hourly		B.A. +20*	Per Diem	Hourly		B.A. +40*	Per Diem	Hourly		B.A. +60*	Per Diem	Hourly
1	53,582	240.28	30.03		56,261	252.29	31.54		59,074	264.91	33.11		62,028	278.15	34.77
2	55,725	249.89	31.24		58,512	262.38	32.80		61,437	275.50	34.44		64,509	289.28	36.16
3	57,954	259.88	32.49		60,852	272.88	34.11		63,895	286.52	35.82		67,089	300.85	37.61
4	60,272	270.28	33.79		63,286	283.79	35.47		66,450	297.98	37.25		69,773	312.88	39.11
5	62,683	281.09	35.14		65,818	295.15	36.89		69,108	309.90	38.74		72,564	325.40	40.67
6	65,191	292.33	36.54		68,450	306.95	38.37		71,873	322.30	40.29		75,466	338.41	42.30
7	67,798	304.03	38.00		71,188	319.23	39.90		74,748	335.19	41.90		78,485	351.95	43.99
8	70,510	316.19	39.52		74,036	332.00	41.50		77,738	348.60	43.57		81,624	366.03	45.75
9	73,331	328.84	41.10		76,997	345.28	43.16		80,847	362.54	45.32		84,889	380.67	47.58
10	76,264	341.99	42.75		80,077	359.09	44.89		84,081	377.04	47.13		88,285	395.90	49.49
11	80,077	359.09	44.89		84,081	377.04	47.13		88,285	395.90	49.49		92,699	415.69	51.96
16	84,081	377.04	47.13		88,285	395.90	49.49		92,699	415.69	51.96		97,334	436.48	54.56
21	86,603	388.36	48.54		90,934	407.77	50.97		95,480	428.16	53.52		100,254	449.57	56.20

Hourly Certificated Positions

PT/FT Temporary Supervisory Teacher - \$28.09 per hour
Curriculum Writers - \$27.88 per hour
Curriculum Data Entry - \$21.40 per hour

Stipends

Masters \$2,000.00 annual
Doctorate \$3,500.00 annual
WASC Accreditation \$5,000.00 annual

Stipends for Longevity

11th	Year	5%
16th	Year	5%
21st	Year	3%

*Column Advancement Criteria

Upper division/graduate college semester units earned from an accredited college or university

Board Approved: 6/19/2007

Board Amended: 8/17/2010 6/19/2018

Board Amended: 2/18/2014

Board Amended: 4/15/2014

Board Amended: 4/21/2015

Board Amended: 6/16/2015

Board Amended: 10/05/2017

DRAFT

**PACIFIC VIEW CHARTER SCHOOL
2018-19 CERTIFICATED SALARY SCHEDULE
SUPERVISORY TEACHER ~ GRADES K - 8
*Educational Specialist Teacher***

**Work Year
192 Days**

	I			II			III			IV		
	B.A.	Per Diem	Hourly	B.A. +20*	Per Diem	Hourly	B.A. +40*	Per Diem	Hourly	B.A. +60*	Per Diem	Hourly
1	46,126	240.24	30.03	48,432	252.25	31.53	50,854	264.86	33.11	53,397	278.11	34.76
2	47,971	249.85	31.23	50,370	262.34	32.79	52,888	275.46	34.43	55,532	289.23	36.15
3	49,890	259.84	32.48	52,384	272.84	34.10	55,004	286.48	35.81	57,754	300.80	37.60
4	51,885	270.24	33.78	54,480	283.75	35.47	57,204	297.94	37.24	60,064	312.83	39.10
5	53,961	281.05	35.13	56,659	295.10	36.89	59,492	309.85	38.73	62,466	325.35	40.67
6	56,119	292.29	36.54	58,925	306.90	38.36	61,872	322.25	40.28	64,965	338.36	42.30
7	58,364	303.98	38.00	61,282	319.18	39.90	64,346	335.14	41.89	67,564	351.89	43.99
8	60,699	316.14	39.52	63,734	331.95	41.49	66,920	348.54	43.57	70,266	365.97	45.75
9	63,127	328.78	41.10	66,283	345.22	43.15	69,597	362.48	45.31	73,077	380.61	47.58
10	65,652	341.94	42.74	68,934	359.03	44.88	72,381	376.98	47.12	76,000	395.83	49.48
11	68,934	359.03	44.88	72,381	376.98	47.12	76,000	395.83	49.48	79,800	415.63	51.95
16	72,381	376.98	47.12	76,000	395.83	49.48	79,800	415.63	51.95	83,790	436.41	54.55
21	74,552	388.29	48.54	78,280	407.71	50.96	82,194	428.09	53.51	86,304	449.50	56.19

Hourly Certificated Positions

PT/FT Temporary Supervisory Teacher - \$28.09 per hour
Curriculum Writers - \$27.88 per hour
Curriculum Data Entry \$21.40 per hour

Stipends

Masters \$2,000.00 annual
Doctorate \$3,500.00 annual
WASC Accreditation \$5,000.00 annual

Stipends for Longevity

11th	Year	5%
16th	Year	5%
21st	Year	3%

***Column Advancement Criteria**

Upper division/graduate college semester units earned from an accredited college or university

Board Approved 6/19/2007
Board Amended 8/17/2010
Board Amended 2/18/2014
Board Amended 4/15/2014
Board Amended: 4/21/2015
Board Amended: 6/16/2015
Board Amended: 10/05/2017

6/19/2018

DRAFT

PACIFIC VIEW CHARTER SCHOOL 2018-19 CERTIFICATED SALARY SCHEDULE LEAD TEACHER ~ GRADES 9 -12

Work Year
223 Days

	I			II			III			IV		
	B.A.	Per Diem	Hourly	B.A. +20*	Per Diem	Hourly	B.A. +40*	Per Diem	Hourly	B.A. +60*	Per Diem	Hourly
1	57,515	257.91	32.24	60,391	270.81	33.85	63,410	284.35	35.54	66,581	298.57	37.32
2	59,816	268.23	33.53	62,806	281.64	35.21	65,947	295.73	36.97	69,244	310.51	38.81
3	62,208	278.96	34.87	65,319	292.91	36.61	68,585	307.55	38.44	72,014	322.93	40.37
4	64,697	290.12	36.26	67,931	304.63	38.08	71,328	319.86	39.98	74,894	335.85	41.98
5	67,284	301.72	37.72	70,649	316.81	39.60	74,181	332.65	41.58	77,890	349.28	43.66
6	69,976	313.79	39.22	73,475	329.48	41.19	77,148	345.96	43.24	81,006	363.25	45.41
7	72,775	326.34	40.79	76,414	342.66	42.83	80,234	359.79	44.97	84,246	377.78	47.22
8	75,686	339.40	42.42	79,470	356.37	44.55	83,444	374.19	46.77	87,616	392.90	49.11
9	78,713	352.97	44.12	82,649	370.62	46.33	86,781	389.15	48.64	91,120	408.61	51.08
10	81,862	367.09	45.89	85,955	385.45	48.18	90,253	404.72	50.59	94,765	424.96	53.12
11	85,955	385.45	48.18	90,253	404.72	50.59	94,765	424.96	53.12	99,504	446.20	55.78
16	90,253	404.72	50.59	94,765	424.96	53.12	99,504	446.20	55.78	104,479	468.51	58.56
21	92,960	416.86	52.11	97,608	437.70	54.71	102,489	459.59	57.45	107,613	482.57	60.32

Stipends for Advanced Degrees

Masters	2,000
Doctorate	3,500

Extra Duty Pay

Curriculum Writers - \$27.88 per hour

Stipends for Longevity

11th	Year	5%
16th	Year	5%
21st	Year	3%

*Column Advancement Criteria

Upper division/graduate college semester units earned from an accredited college or university

Board Approved: 05/15/2012

Board Amended: 06/16/2016

Board Amended: 10/05/2017

Board Amended: 06/19/2018

DRAFT

PACIFIC VIEW CHARTER SCHOOL 2018-19 CERTIFICATED SALARY SCHEDULE LEAD TEACHER ~ GRADES K - 8

Work Year
192 Days

	I				II				III				IV		
	B.A.	Per Diem	Hourly		B.A. +20*	Per Diem	Hourly		B.A. +40*	Per Diem	Hourly		B.A. +60*	Per Diem	Hourly
1	50,065	260.76	32.59		52,568	273.79	34.22		55,197	287.48	35.94		57,956	301.86	37.73
2	52,068	271.19	33.90		54,671	284.74	35.59		57,405	298.98	37.37		60,275	313.93	39.24
3	54,150	282.03	35.25		56,858	296.13	37.02		59,701	310.94	38.87		62,686	326.49	40.81
4	56,316	293.31	36.66		59,132	307.98	38.50		62,089	323.38	40.42		65,193	339.55	42.44
5	58,569	305.05	38.13		61,497	320.30	40.04		64,572	336.31	42.04		67,801	353.13	44.14
6	60,912	317.25	39.66		63,957	333.11	41.64		67,155	349.77	43.72		70,513	367.25	45.91
7	63,348	329.94	41.24		66,516	346.44	43.30		69,841	363.76	45.47		73,333	381.95	47.74
8	65,882	343.14	42.89		69,176	360.29	45.04		72,635	378.31	47.29		76,267	397.22	49.65
9	68,517	356.86	44.61		71,943	374.70	46.84		75,540	393.44	49.18		79,317	413.11	51.64
10	71,258	371.14	46.39		74,821	389.69	48.71		78,562	409.18	51.15		82,490	429.64	53.70
11	74,821	389.69	48.71		78,562	409.18	51.15		82,490	429.64	53.70		86,615	451.12	56.39
16	78,562	409.18	51.15		82,490	429.64	53.70		86,615	451.12	56.39		90,945	473.67	59.21
21	80,919	421.45	52.68		84,965	442.53	55.32		89,213	464.65	58.08		93,674	487.88	60.99

Stipends for Advanced Degrees

Masters	2,000
Doctorate	3,500

Extra Duty Pay

Curriculum Writers - \$27.88 per hour

Stipends for Longevity

11th	Year	5%
16th	Year	5%
21st	Year	3%

*Column Advancement Criteria

Upper division/graduate college semester units earned from an accredited college or university

Board Approved 05/15/2012

Board Amended: 06/16/2016

Board Amended: 10/05/2017

Board Amended: 06/19/2018

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PACIFIC VIEW CHARTER SCHOOL 2018-19 CERTIFICATED SCHOOL COUNSELOR SALARY SCHEDULE SCHOOL COUNSELOR

Work Year
223 Days

	I			II			III			IV		
	B.A.	Per Diem	Hourly	B.A. +20*	Per Diem	Hourly	B.A. +40*	Per Diem	Hourly	B.A. +60*	Per Diem	Hourly
1	54,570	244.71	30.59	57,299	256.94	32.12	60,163	269.79	33.72	63,172	283.28	35.41
2	56,753	254.50	31.81	59,590	267.22	33.40	62,570	280.58	35.07	65,698	294.61	36.83
3	59,023	264.68	33.08	61,974	277.91	34.74	65,073	291.81	36.48	68,326	306.40	38.30
4	61,384	275.26	34.41	64,453	289.03	36.13	67,676	303.48	37.93	71,059	318.65	39.83
5	63,839	286.27	35.78	67,031	300.59	37.57	70,383	315.62	39.45	73,902	331.40	41.42
6	66,393	297.73	37.22	69,712	312.61	39.08	73,198	328.24	41.03	76,858	344.65	43.08
7	69,048	309.63	38.70	72,501	325.12	40.64	76,126	341.37	42.67	79,932	358.44	44.81
8	71,810	322.02	40.25	75,401	338.12	42.27	79,171	355.03	44.38	83,130	372.78	46.60
9	74,683	334.90	41.86	78,417	351.65	43.96	82,338	369.23	46.15	86,455	387.69	48.46
10	77,670	348.30	43.54	81,554	365.71	45.71	85,631	384.00	48.00	89,913	403.20	50.40
11	81,554	365.71	45.71	85,631	384.00	48.00	89,913	403.20	50.40	94,409	423.36	52.92
16	85,631	384.00	48.00	89,913	403.20	50.40	94,409	423.36	52.92	99,129	444.52	55.57
21	88,200	395.52	49.44	92,610	415.29	51.91	97,241	436.06	54.51	102,103	457.86	57.23

Stipends for Advanced Degrees

Masters	2,000
Doctorate	3,500

Stipends for Longevity

11th	Year	5%
16th	Year	5%
21st	Year	3%

***Column Advancement Criteria**

Upper division/graduate college semester units
earned from an accredited college or university

Board Approved: 04/21/2015

Board Amended: 10/05/2017

Board Amended: 6/19/2018

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**PACIFIC VIEW CHARTER SCHOOL
2018-19 CERTIFICATED SALARY SCHEDULE
SITE SUPERVISOR**

233 Work Year

POSITION	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
High School Site Supervisor	81,553	84,815	88,208	91,736	95,406	99,222	103,191

Stipends for advanced degrees

Masters	2,000
Doctorate	3,500

Stipend for Longevity

8th Year	5%
13th Year	5%
18th Year	3%

High School Site Supervisor

Student Caseload to be determined by Executive Director

Board Approved: 08/18/2015

Board Amended: 04/18/2017

Board Amended: 10/05/2017

Board Amended: **06/19/2018**

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PACIFIC VIEW CHARTER SCHOOL 2018-19 EXECUTIVE LEADERSHIP SALARY SCHEDULE

CERTIFICATED

POSITION	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
Executive Director	165,635	172,260	179,151	186,317	193,770	201,520	-
Director of Student Services*	90,777	94,408	98,184	102,112	106,196	110,444	114,862
Director of Curriculum*	87,285	90,776	94,407	98,184	102,111	106,196	110,443

CLASSIFIED

POSITION	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
Director of Central Office and Finance*	102,716	106,825	111,098	115,542	120,163	124,970	129,969

Director of Student Services/ Director of Curriculum
Student Caseload to be determined by Executive Director

Stipends for advanced degrees

Masters	\$ 2,000.00
Doctorate	\$ 3,500.00
WASC	\$ 5,000.00

Board Approved 05/17/2011

***Stipend for Longevity**

8th Year	5%
13th Year	5%
18th Year	3%

Board Amended: 07/19/2011 02/18/2014 6/19/2018

05/15/2012 05/20/2014

06/19/2012 04/21/2015

06/24/2013 06/15/2015

08/20/2013 10/15/2017

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**PACIFIC VIEW CHARTER SCHOOL
2018-19 CLASSIFIED SALARY SCHEDULE**

MONTHLY

POSITION	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
College Liaison	\$ 3,351.72	\$ 3,485.79	\$ 3,625.22	\$ 3,770.23	\$ 3,921.04	\$ 4,077.88	\$ 4,241.00
	\$ 40,220.64	\$ 41,829.47	\$ 43,502.64	\$ 45,242.75	\$ 47,052.46	\$ 48,934.56	\$ 50,891.94
Business Services Assistant	\$ 3,055.41	\$ 3,177.63	\$ 3,304.73	\$ 3,436.92	\$ 3,574.40	\$ 3,717.37	\$ 3,866.07
	\$ 36,664.92	\$ 38,131.52	\$ 39,656.78	\$ 41,243.05	\$ 42,892.77	\$ 44,608.48	\$ 46,392.82
Instructional Aide	\$ 2,326.90	\$ 2,419.98	\$ 2,516.78	\$ 2,617.45	\$ 2,722.14	\$ 2,831.03	\$ 2,944.27
	\$ 27,922.80	\$ 29,039.71	\$ 30,201.30	\$ 31,409.35	\$ 32,665.73	\$ 33,972.36	\$ 35,331.25
Lead Instructional Aide	\$ 2,695.42	\$ 2,803.24	\$ 2,915.37	\$ 3,031.98	\$ 3,153.26	\$ 3,279.39	\$ 3,410.57
	\$ 32,345.04	\$ 33,638.84	\$ 34,984.40	\$ 36,383.77	\$ 37,839.12	\$ 39,352.69	\$ 40,926.79
Office Clerk	\$ 2,566.73	\$ 2,669.40	\$ 2,776.18	\$ 2,887.22	\$ 3,002.71	\$ 3,122.82	\$ 3,247.73
	\$ 30,800.76	\$ 32,032.79	\$ 33,314.10	\$ 34,646.67	\$ 36,032.53	\$ 37,473.83	\$ 38,972.79
Office Clerk - Bilingual	\$ 2,903.78	\$ 3,019.93	\$ 3,140.73	\$ 3,266.36	\$ 3,397.01	\$ 3,532.89	\$ 3,674.21
	\$ 34,845.36	\$ 36,239.17	\$ 37,688.74	\$ 39,196.29	\$ 40,764.14	\$ 42,394.71	\$ 44,090.50
Receptionist	\$ 2,091.96	\$ 2,175.64	\$ 2,262.66	\$ 2,353.17	\$ 2,447.30	\$ 2,545.19	\$ 2,647.00
	\$ 25,103.52	\$ 26,107.66	\$ 27,151.97	\$ 28,238.05	\$ 29,367.57	\$ 30,542.27	\$ 31,763.96

Work Year
233 Days

HOURLY

POSITION	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
Business Services Assistant	\$ 19.67	\$ 20.46	\$ 21.28	\$ 22.13	\$ 23.01	\$ 23.93	\$ 24.89
Instructional Aide & <i>Educational Specialist</i> <i>Instructional Aide</i>	\$ 14.98	\$ 15.58	\$ 16.20	\$ 16.85	\$ 17.52	\$ 18.23	\$ 18.95
Enrichment/Intervention Instructor	\$ 21.40	\$ 22.26	\$ 23.15	\$ 24.07	\$ 25.03	\$ 26.04	\$ 27.08

Support Services Stipend **\$5,000.00 annually**

Stipends for Longevity

8th Year	5%
13th Year	5%
18th Year	3%

Board Approved: 6/21/2011
 Board Amended: 5/20/2014
 Board Amended: 6/16/2015
 Board Amended: 06/29/2015
 Board Amended: 06/27/2016
 Board Amended: 2/21/2017
 Board Amended: 10/05/2017
 Board Amended: 11/14/2017
Board Amended: 06/19/2018

DRAFT

PACIFIC VIEW CHARTER SCHOOL 2018-19 CONFIDENTIAL CLASSIFIED SALARY SCHEDULE

ANNUAL

POSITION	STEP 1	STEP 2	STEP 3	STEP 4	STEP 5	STEP 6	STEP 7
Human Resources & Business Specialist (237)	67,270	69,961	72,759	75,669	78,696	81,844	85,118
Technology Technician (248)	60,726	63,155	65,681	68,308	71,040	73,882	76,837

Stipends for Longevity:

8th Year	5%
13th Year	5%
18th Year	3%

Board Approved: 08/17/2010

Board Amended: 06/21/2011

07/19/2011

02/18/2014

06/16/2015

10/05/2017

6/19/2018

9.1

Pacific View Charter School

Curriculum and Instruction

Policy #10

Demonstration of Mastery in Mathematics

Demonstration of Mastery in a Mathematics course shall be demonstrated by scoring 70% or better on a cumulative final exam, and placement on the Math Placement Guide indicating student is ready for that class.

Board Approved: 01/21/2014

Amended:

9.2

Pacific View Charter School Course Outline

Course Title: Literacy Prep. A

Course #: 1224

Department: Electives

Credits: 5

Course Description: Literacy Prep. is a comprehensive course designed to raise reading achievement. The curriculum meets students where they are and is designed to accelerate them to grade level and beyond. Literacy Prep. prepares students to read, write, speak, listen, and use language in a variety of content areas and contexts. Literacy Prep. helps students build independence in the following domains: build independence as readers, speak confidently and listen critically, write critically and effectively, and encounter worldviews.

Student Outcomes:

The student will be able to:

- 1) Read and analyze multimedia and print text critically.
- 2) Demonstrate a command of Standard English and choose precise academic language.
- 3) Build knowledge through the selection and comprehension of increasingly complex informational and literary texts.
- 4) Acquire and use a wide-ranging vocabulary.
- 5) Gather, comprehend, evaluate, synthesize, and report on information and ideas.
- 6) Use evidence to construct effective arguments.
- 7) Develop study skills to maximize learning in all classes.
- 8) Critically and constructively evaluate other points of view.

Assessment: Ongoing diagnostic and formative assessments will assess student performance and fluency in reading, vocabulary, and spelling. Writing assessments test students' understanding of writing skills addressed in whole- and small-group instruction.

Instructional Materials: READ 180 Rbook and Lbook, and other supplemental reading materials.

Board Approval:

Pacific View Charter School Course Outline

Course Title: Literacy Prep. B

Course #: 1225

Department: Electives

Credits: 5

Course Description: Literacy Prep. is a comprehensive course designed to raise reading achievement. The curriculum meets students where they are and is designed to accelerate them to grade level and beyond. Literacy Prep. prepares students to read, write, speak, listen, and use language in a variety of content areas and contexts. Literacy Prep. helps students build independence in the following domains: build independence as readers, speak confidently and listen critically, write critically and effectively, and encounter worldviews.

Student Outcomes:

The student will be able to:

- 1) Read and analyze multimedia and print text critically.
- 2) Demonstrate a command of Standard English and choose precise academic language.
- 3) Build knowledge through the selection and comprehension of increasingly complex informational and literary texts.
- 4) Acquire and use a wide-ranging vocabulary.
- 5) Gather, comprehend, evaluate, synthesize, and report on information and ideas.
- 6) Use evidence to construct effective arguments.
- 7) Develop study skills to maximize learning in all classes.
- 8) Critically and constructively evaluate other points of view.

Assessment: Ongoing diagnostic and formative assessments will assess student performance and fluency in reading, vocabulary, and spelling. Writing assessments test students' understanding of writing skills addressed in whole- and small-group instruction.

Instructional Materials: READ 180 Rbook and Lbook, and other supplemental reading materials.

Board Approval:

Pacific View Charter School Course Outline

Course Title: Literacy Prep. C

Course #: 1226

Department: Electives

Credits: 5

Course Description: Literacy Prep. is a comprehensive course designed to raise reading achievement. The curriculum meets students where they are and is designed to accelerate them to grade level and beyond. Literacy Prep. prepares students to read, write, speak, listen, and use language in a variety of content areas and contexts. Literacy Prep. helps students build independence in the following domains: build independence as readers, speak confidently and listen critically, write critically and effectively, and encounter worldviews.

Student Outcomes:

The student will be able to:

- 1) Read and analyze multimedia and print text critically.
- 2) Demonstrate a command of Standard English and choose precise academic language.
- 3) Build knowledge through the selection and comprehension of increasingly complex informational and literary texts.
- 4) Acquire and use a wide-ranging vocabulary.
- 5) Gather, comprehend, evaluate, synthesize, and report on information and ideas.
- 6) Use evidence to construct effective arguments.
- 7) Develop study skills to maximize learning in all classes.
- 8) Critically and constructively evaluate other points of view.

Assessment: Ongoing diagnostic and formative assessments will assess student performance and fluency in reading, vocabulary, and spelling. Writing assessments test students' understanding of writing skills addressed in whole- and small-group instruction.

Instructional Materials: READ 180 Rbook and Lbook, and other supplemental reading materials.

Board Approval:

Pacific View Charter School Course Outline

Course Title: Literacy Prep. D

Course #: 1227

Department: Electives

Credits: 5

Course Description: Literacy Prep. is a comprehensive course designed to raise reading achievement. The curriculum meets students where they are and is designed to accelerate them to grade level and beyond. Literacy Prep. prepares students to read, write, speak, listen, and use language in a variety of content areas and contexts. Literacy Prep. helps students build independence in the following domains: build independence as readers, speak confidently and listen critically, write critically and effectively, and encounter worldviews.

Student Outcomes:

The student will be able to:

- 1) Read and analyze multimedia and print text critically.
- 2) Demonstrate a command of Standard English and choose precise academic language.
- 3) Build knowledge through the selection and comprehension of increasingly complex informational and literary texts.
- 4) Acquire and use a wide-ranging vocabulary.
- 5) Gather, comprehend, evaluate, synthesize, and report on information and ideas.
- 6) Use evidence to construct effective arguments.
- 7) Develop study skills to maximize learning in all classes.
- 8) Critically and constructively evaluate other points of view.

Assessment: Ongoing diagnostic and formative assessments will assess student performance and fluency in reading, vocabulary, and spelling. Writing assessments test students' understanding of writing skills addressed in whole- and small-group instruction.

Instructional Materials: READ 180 Rbook and Lbook, and other supplemental reading materials.

Board Approval:

9.3

Pacific View Charter School Course Outline

Course Title: Integrated Science A

Course #: 1069

Department: Science

Credits: 5

Course Description: This course employs a concept-oriented investigative approach to science. Integrated Science A covers topics such as heat, waves, electricity and magnetism, motion, universal law of gravity, and the conservation of energy and momentum. Students will interact with branches of earth, physical, and life sciences through data analysis, readings, demonstrations, and audio/visual media.

Student Outcomes:

The student will be able to:

1. Identify and describe the relevant components in the mathematical representation for frequency, wavelength, and speed of waves traveling in various specified media.
2. Use tools, technologies and models to identify relationships including net force on different size massed objects and the corresponding acceleration.
3. Based on the analysis of the total momentum of the system, support the claim that the momentum of the system is the same before and after the interaction between the objects in the system, so that momentum of the system is constant.
4. Understand that energy cannot be created or destroyed.
5. Know that in many processes energy is transferred as heat to the environment.
6. Identify the natural phenomenon of gravity on Earth, in the solar system, and universe.

Assessment: Student outcomes will be based on homework, quizzes, illustrations, and exams.

Instructional Materials: Conceptual Integrated Science Pearson Education- Prentice Hall, 2007, phet.colorado.edu, www.ck12.org

Board Approval Date: 1/16/07

Pacific View Charter School Course Outline

Course Name: Integrated Science B

Course #: 1070

Department: Science

Credits: 5

Course Description: This course employs a concept-oriented investigative approach to science. Integrated Science B covers topics such as atoms, nuclear physics, matter, chemical bonds, chemical reactions, and organic chemistry. Students will interact with branches of earth, physical, and life sciences through data analysis, readings, demonstrations, and audio/visual media.

Student Outcomes:

The student will be able to:

1. Describe atoms, molecules and chemical bonds.
2. Explore the conservation of atoms in chemical reactions.
3. Use the periodic table as a tool to predict the physical and chemical properties of elements.
4. Explore how chemical energy is exchanged or transformed in all chemical reactions.
5. Know that matter cannot be created or destroyed.
6. Use a model to identify chemical process that produce energy that require fusion or fission.
7. Understand the lock and key model for drug action.
8. Know the difference between organic and inorganic compounds.

Assessment: Student outcomes will be based on homework, quizzes, illustrations, and exams.

Instructional Materials: Conceptual Integrated Science Pearson Education- Prentice Hall, 2007, phet.colorado.edu, www.ck12.org

Board Approval Date:1/16/07