



CITY OF PENDLETON

Requests for Bid Proposal Building Roofing Replacements August 26th, 2016

Facilities Department
500 S.W. Dorion Avenue
Pendleton, Oregon 97801-2090
Telephone (541) 966-0370
FAX (541) 966-0271
Website: www.pendleton.or.us

The City of Pendleton Facilities Department is accepting bid proposals to install new membrane roofing system. Proposal must be returned by September 19th 2016 by 2 PM to Glenn Graham Facilities Managers Office 500 Southwest Dorion Avenue Pendleton, Oregon 97801 clearly mark envelope: *PCC & OWL Building Roofing Replacements.*

Buildings to be reroofed:

- A. Pendleton Convention Center 1600 Westgate Pendleton, OR square footage 8,436 top of gymnasium only.
- B. Convention Ctr., South lower roof square footage 3,806 see note
- C. Airport OWL, building Pendleton, OR square footage 4,025.5 see note

Note: all square footage are estimates measurements contractors responsibility to field verify all roofing measurements for square footage.

Notes: Please breakout all building roofing pricing individually.
Convention Ctr., South lower roof will be an added alternative if funding is available.
See attached building roofing maps

General information:

Site visit required Walk-through of buildings Thursday September 1,2016 @ 10 AM at the Convention Center front lobby 1600 Westgate Pendleton, Oregon and then to Airport building..

1. Project will commence after letter to proceed and be completed in 60 working days.
2. Contractor responsible for removal of old roofing system as needed and all debris and disposal as needed.
3. Contractor shall obtain building permits and required inspections, permit fees waived only.
4. Contractor shall provide detailed assembly specifications to building department for Permits.
5. Obtain all permits including City business license as necessary prior to beginning project.
6. Contractors must comply with Oregon building codes and local building official jurisdiction.
7. City of Pendleton Public Contract Addendum setting forth terms required to be included in all local government contracts.
8. There are no asbestos materials in this project.
9. Contractor responsibilities to field verify all roofing requirements necessary and square footage for turnkey install.
10. Provide product specifications with proposal and warranty of roofing system.



11. Minimum 20-25 year warranty.
12. Provide all materials necessary to meet or exceed specifications below.

Convention Center:

13. Provide Firestone UltraPly™ TPO is a flexible Thermoplastic Polyolefin roofing membrane that is produced with polyester weft-inserted reinforcement. This heat weldable TPO membrane is 60 mil (1.5 mm) thicknesses in 8' (2.4 m), 10' (3 m) and 12'4" (3.76 m) widths. Color white. See attached specifications sheets

Airport owl building:

14. The assembly EPS flute filler that is cut to fit in the pan, a layer of 1.5" ISO on top of that mechanically attached to the existing roofing. Firestone Invisiweld plates are then fastened through the perlins at 12" OC in the field and enhanced in the perimeter and corners. The membrane is then installed and induction welded to the plates. Provide Firestone UltraPly™ TPO is a flexible Thermoplastic Polyolefin roofing membrane that is produced with polyester weft-inserted reinforcement. This heat weldable TPO membrane is 60 mil (1.5 mm) thicknesses in 8' 2.4 m), 10' (3 m) and 12'4" (3.76 m) widths. Color white. See attached specifications sheets

METHOD OF APPLICATION:

Firestone UltraPly TPO membrane is installed as continuous roofing or waterproofing layer on the roof. Rolls are overlapped (side laps and end laps) prior to the heat welding of the seam areas. Install the UltraPly TPO Roofing System in accordance with current Firestone UltraPly TPO

Specifications, details and workmanship requirements. Please contact Firestone Roofing Solutions or visit the Firestone Technical Database for additional information at www.Firestonebpco.com.

1. Provide crickets where necessary for drainage.
2. Provide heat welded walk mats from roof access to around all HVAC units. @ PCC
3. Replace all roofing flashings for watertight terminations Firestone.
4. All vinyl roofing shall be terminated under roof flashing.
5. Wrap with approved Firestone method all penetrations and HVAC per- manufactures specifications.
6. Provide insulated energy3 rigid roof installation & taper to drains as necessary to prevent ponding.
7. Wrap with roofing material to all overflow stuffers; replace roof drain covers and drains if necessary.
8. This job will be Oregon prevailing wages BOLI requirements if over 50K.
9. Contractor shall provide Facilities Manager work schedule of activities.
10. Contractor shall make provisions to protect against inclement weather during this roofing project.
11. Contractor shall provide manufactures warranty documentation's and roof maintenance manuals upon close out with contact information on warranty procedures, in three ring binder clearly labeled Roofing 2016 per building.
12. Contractor will provide rubberized protection on all HVAC units sitting directly on the vinyl roofing, all electrical conduits; antennas are other miscellaneous non-penetrating devices shall have a rubberized sheet for protection of vinyl roofing.

Scope of project: 12,242 ft.² roofing project.

Remove existing roofing where necessary and associated materials. Roof to be clean and free of debris for new roof assembly Firestone UltraPly™ TPO 60 mill prepare roof per- manufacture specifications. Wrap all penetrations per-manufacturer's recommendations, wrap all HVAC units, and provide heat welded walk mats to all HVAC units. Mechanically & fully Adhered fastening the membrane system per-manufacturers design for 90 MPH, wind exposure. Provide crickets were necessary for drainage to roof drains.

Special Requirements:

- A. Convention Center reuse existing rigid insulation.

- B. Airport OWL building use existing metal roofing with the Firestone assembly EPS flute filler.

- C. Convention Ctr., South front roof reuse existing insulation.

Review and be familiar with the enclosed bid proposal specifications. Failure to review the specifications will not relieve the successful contractor of an obligation to furnish all products, services and labor necessary to carry out the provisions of the Bid proposal.

City shall award bid or reserve the right to reject any or all proposals, to postpone the award of the bid for a period not to exceed thirty (30) days, and to accept the proposal or any portion of the Proposal which is to the best interest of the City of Pendleton, Oregon. The City reserves the right to delete a portion of the project or renegotiating the lump sum bid, if funding is not available.

Sincerely,

Glenn S. Graham
Facilities Manager

*attached documents:

Google's Site map (one)
Product specifications

RFP Roofing project: Pendleton Convention Center & OWL building at Eastern Oregon Regional Airport

Pendleton, OR 97801

PROPOSER'S CERTIFICATION AND STATEMENT OF NON-COLLUSION

THIS PAGE MUST BE COMPLETED AND SUBMITTED AS A PART OF YOUR PROPOSAL

I _____ certify that this proposal is made without prior understanding, agreement or connection with any corporation, firm or person submitting a proposal for the same services and is in all respects fair and without collusion or fraud. I understand that collusive bidding is a violation of state and Federal law and can result in fines, prison sentences and civil damages awards.

I certify that this proposal has been prepared independently and the price submitted will not be disclosed to another person.

I certify that there has been no contact or communication by the proposer or the proposer's associates with any City staff, or elected officials since the date this RFP was issued. The City reserves the right to reject the proposal submitted by any proposer violating this provision.

I agree to abide by all conditions of this proposal and certify that I am authorized to sign this proposal.

COMPANY NAME: _____

Authorized Representative (Signature) _____ Date: _____

Authorized Representative Title: _____

(Print or Type)

CITY OF PENDLETON
Public Contracts Addend

PAGES MUST BE COMPLETED AND SUBMITTED AS A PART OF YOUR PROPOSAL

The contract to which this addendum is attached shall be governed by the additional terms and conditions set forth herein:

1. The Contractor shall make payment promptly, as due, to all persons supplying to such Contractor labor or materials for the prosecution of the work provided in the contract.
2. The Contractor shall provide workers' compensation insurance coverage for all individuals, others than those exempt under ORS 656.027, who perform labor under the contract before labor under the contract commences. Contractor shall pay all contributions or amounts due for Workers' Compensation coverage from the Contractor incurred in the performance of the contract.
3. The contractor will not permit any lien or claim to be filed or prosecuted against the City on account of any material or labor furnished to the Contractor.
4. The Contractor will pay to the Oregon Department of Revenue all sums withheld from employees pursuant to Oregon Statutes.
5. If the Contractor fails, neglects, or refuses to make prompt payment of any claim for labor or services furnished to the Contractor or a subcontractor by any person in connection with this contract as such claim shall become due, the proper officer or officers representing the City may pay such claim to the person furnishing the labor or service and charge the amount of the payment against funds due or to become due to the Contractor by reason of this contract.
6. The payment of a claim in this manner authorized by this paragraph shall not relieve the Contractor or the Contractor's surety from obligation with respect to any unpaid claim.
7. No person shall be employed for more than eight hours in any one day, or forty hours in any one week, except in case of necessity, emergency, or where the public policy absolutely requires it, and in such cases the laborer shall be paid at least time and a half for all overtime worked in excess of 40 hours in any one week, except for individuals under this contract who are excluded under ORS 653.010 to 653.261 or under 29 U.S.C. sections 201 to 209 from receiving overtime.
8. The Contractor shall promptly, as due, make payment to any person, copartnership, association or corporation, furnishing medical, surgical and hospital care or other needed care and attention, incident to sickness or injury, to the employees of such Contractor, of all sums which the Contractor agrees to pay for such services and all moneys and sums which the Contractor collected or deducted from wages of employees pursuant to any law, contract, or agreement for the purpose of providing or pay for such service.
9. Any and all employees of Contractor or his contractors while engaged or performing any work or services required by him under this agreement shall be considered his employees only and not employees of the City and any claims that may arise under the Workers' Compensation Act on behalf of the said employees while so engaged in any and all claims made by third parties as a consequence of any act or omission on the part of him or his employees while so engaged on any of the work or services provided to be rendered herein

shall be the sole obligation responsibility of Contractor and/or his contractors. The parties to this agreement recognize that Contractor and his employees, officers, agents and subcontractors are providing professional services as independent contractors and are not providing services as employees of the City and are therefore not entitled to the benefits provided by the City to his employees, including but not limited to Workers' Compensation benefits, group health insurance, social security, pension plans, or any other benefit accruing to City employees. Contractor hereby agrees to hold the City harmless from, and shall process and defend at his own expense, all claims, demands, or suits of whatever nature, brought against him arising from his performance under this agreement. Contractor shall advise his officers, agents, employees and subcontractors of this provision

10. Liability and Indemnity

- a. Indemnification. Contractor shall indemnify and defend City from, and reimburse City for, any cost, claim, loss, or liability suffered directly or from a third-party claim arising out of or related to any negligent activity of Contractor on the in the execution of this contract. City shall have no liability to Contractor for any injury, loss, or damage caused by Contractor or third parties.
- b. Liability Insurance. Before beginning execution of the contract, Contractor shall obtain and thereafter during the term of the contract shall continue to carry the following liability insurance at Contractor's cost: comprehensive general liability insurance in a responsible company with limits of not less than \$200,000/500,000 for injury to one person, \$500,000 for injury to two or more persons in one occurrence, and \$50,000/\$500,000 for damage to property. Such insurance shall cover all risks arising directly or indirectly out of Contractor's activities. Such insurance shall protect Contractor against the claims on account of the obligations assumed by Contractor under Section 11;.a, and shall name City as an additional insured. Certificates evidencing such insurance and bearing endorsements requiring 10 days' written notice to City before any change or cancellation shall be furnished to City before Contractor begins execution of the Contract.

11. Contractor certifies that:

- a. Contractor is free from direction and control over the means and manner of providing the labor or services, subject only to the right of City to specify the desired results;
- b. Contractor is responsible for obtaining all assumed business registrations or professional occupational licenses required by state law or local governmental ordinances;
- c. Contractor furnishes the tools or equipment necessary for performance of the contracted labor or services;
- d. Contractor has the authority to hire and fire employees to perform the labor or services;
- e. Payment for the labor or services is made upon completion of the performance of specific portions of the project or is made on the basis of a periodic retainer;
- f. Contractor is registered under ORS chapter 701 (Construction Contractors), if Contractor provides labor or services for which such registration is required;
- g. Federal and state income tax returns in the name of the business or a business Schedule C or farm Schedule F as part of the personal income tax return were filed for the previous year if the contractor performed labor or services as an independent contractor in the previous year; and
- h. Contractor represents to the public that the contractor is an independently established business. Except where Contractor files a Schedule F as part of the personal income tax return and the contractor performs farm labor or services that are reportable on Schedule C, Contractor is considered to be engaged in an independently established business when four or more of the following circumstances exist: [Initial those that apply]
 - i. The labor or services are primarily carried out at a location that is separate from the residence of contractor or are primarily carried out in a specific portion of the residence, which portion is set aside as the location of the business;
 - ii. Commercial advertising or business cards as is customary in operating similar businesses are

purchased for the business, or the contractor has a trade association membership;

iii ___ Telephone listing and service are used for the business that is separate from the personal residence listing and service used by contractor;

iv ___ Labor or services are performed only pursuant to written contractors;

v ___ Labor or services are performed for two or more different persons within a period of one year; or

vi ___ Contractor assumes financial responsibility for defective workmanship or for service not provided as evidenced by the ownership of performance bonds, warranties, errors and omission insurance or liability insurance relating to the labor or services provided.

12. The Contractor must obtain a City of Pendleton Business License.

13. If the City does not appropriate funds for the next succeeding fiscal year to continue payments required by this contract, this contract will terminate at the end of the last fiscal year for which funds have been appropriated. The City will notify Contractor of such non-appropriation not later than thirty days before the beginning of the year within which funds are not appropriated. This provision does not permit the City to terminate this contract in order to provide similar services for the purpose for which this contract has been entered into.

14. If any action is instituted in connection with any claim or controversy arising out of this agreement, attorney fees may **not** be awarded by the court of competent jurisdiction and each party shall bear its own expenses of such action.

15. This agreement and the parties rights under it shall be construed and regulated by the laws of the State of Oregon and venue for any dispute hereunder shall lie in Pendleton, Umatilla County, Oregon.

DATED: _____, 2016

Contractor: _____

By: _____

Taxpayer ID No. _____

DATED: _____, 2016

City of Pendleton authorized approval:

By: _____

Facilities Manager

Specifications Pendleton Convention Center

Firestone



TOP Roof PCC

Lobby roof

Pendleton convention center Pendleton convention center

Firestone

BUILDING PRODUCTS

UltraPly™ TPO

DESCRIPTION:

Firestone UltraPly™ TPO is a flexible Thermoplastic Polyolefin roofing membrane that is produced with polyester weft-inserted reinforcement. This heat weldable TPO membrane is available in 45 mil (1.1 mm) and 60 mil (1.5 mm) thicknesses in 8' (2.4 m), 10' (3 m) and 12'4" (3.76 m) widths. The colors available are white, tan or gray. This reflective membrane is suitable for a variety of low slope applications.

METHOD OF APPLICATION:

1. Firestone UltraPly TPO membrane is installed as continuous roofing or waterproofing layer on the roof. Rolls are overlapped (side laps and end laps) prior to the heat welding of the seam areas.
2. Install the UltraPly TPO Roofing System in accordance with current Firestone UltraPly TPO specifications, details and workmanship requirements.
3. Please contact Firestone Roofing Solutions or visit the Firestone Technical Database for additional information at www.Firestonebpco.com.

PRODUCT DATA:

Thickness: 0.045" (1.1 mm)
0.060" (1.5 mm)
Width: 5 ft to 12 ft 4 in (1.5 m to 3.75 m)
Length: 100 ft (30.5 m)
Colors: White, Tan, Gray



This sheet is meant to highlight Firestone's products and specifications and is subject to change without notice. Firestone takes responsibility for furnishing quality materials, which meet Firestone's published product specifications. Neither Firestone nor its representatives practice architecture. Firestone offers no opinion on and expressly disclaims any responsibility for the soundness of any structure. Firestone accepts no liability for structural failure or resultant damages. Consult a competent structural engineer prior to installation if the structural soundness or structural ability to properly support a planned installation is in question. No Firestone representative is authorized to vary this disclaimer.



STORAGE:

- Store away from sources of punctures, and physical damage.
- Assure that structural decking will support the loads incurred by material when stored on rooftop. The deck load limitations should be specified by the project designer.
- Store away from ignition sources as membrane will burn when exposed to open flame.

PRECAUTIONS:

- Exercise caution when lifting, moving, transporting, storing or handling membrane rolls to avoid sources of punctures and possible physical damage.
- Contact Firestone Roofing Solutions Department for specific recommendations regarding chemical or waste product compatibility with Firestone UltraPly TPO Membrane.
- Refer to Material Safety Data Sheets (MSDS) for safety information

LEED INFORMATION:

Post Consumer Recycled Content: 0%
Post Industrial Recycled Content: 15%
Manufacturing Location: Wellford, SC
Las Vegas, NV
Tuscumbia, AL



CCMC 13348-R



Firestone Building Products Company, LLC
250 W. 96th Street, Indianapolis, IN 46260
Sales: (800) 428-4442 • Technical: (800) 428-4511
www.firestonebpco.com

TECHNICAL INFORMATION SHEET

201
7/2/2010

UltraPly™ TPO

Firestone BUILDING PRODUCTS

PHYSICAL PROPERTIES

Property	Test Method	ASTM D 6878 Specification	Typical Values	
			45 mil	60 mil
Overall Thickness	ASTM D751	0.039" (1.0 mm) min	0.043" (1.1 mm)	0.056" (1.4 mm)
Coating Over Scrim	ASTM D6878, Annex A	0.012" (0.305 mm) min	0.020" (0.51 mm)	0.025" (0.64 mm)
Breaking Strength	ASTM D751, Grab Method	220 lb _r (975 N) min	340 lb _r (1,510 N)	390 lb _r (1,730 N)
Elongation at Reinforcement Break	ASTM D751, Grab Method	15% min	25%	25%
Tearing Strength	ASTM D751	55 lb _r (245 N) min	120 lb _r (530 N)	120 lb _r (530 N)
Brittleness Point	ASTM D2137	-40 °F (-40 °C)	Pass	Pass
Ozone resistance, no cracks	ASTM D1149	Pass (no cracks)	Pass	Pass
Properties after Heat Aging	ASTM D573	670 h at 240 °F (116 °C)		
Retention of Breaking Strength	ASTM D751, Grab Method	90% min	> 90%	> 90%
Retention of Elongation at Break	ASTM D751, Grab Method	90% min	> 90%	> 90%
Retention of Tearing Strength	ASTM D751	60% min	> 60%	> 60%
Weight Change		± 1% max	< 1%	< 1%
Linear Dimension Change	ASTM D1204 6 h at 158 °F (70 °C)	± 1% max	< 1%	< 1%
Water Absorption	ASTM D471	± 3.0% max	< 3%	< 3%
Weather Resistance	ASTM G155, 80 °C Black Panel, no cracking, crazing when wrapped around a 3" mandrel and inspected at 7x magnification	10,080 kJ/m ² min	> 20,160 kJ/m ²	> 20,160 kJ/m ²
Puncture Resistance	FTM 101C Method 2031	---	265 lb _r (1,180 N)	300 lb _r (1,300 N)
Dynamic Puncture Resistance MD	ASTM D5635	---	Pass (20 J)	Pass (40 J)
Dynamic Puncture Resistance CD	ASTM D5635	---	Pass (35 J)	Pass (50 J)
Static Puncture Resistance	ASTM D5602	---	Pass (25 kg)	Pass (25 kg)

ENERGY STAR®	White	Tan	Cool Roof Rating Council (CRRC)	White	Tan
Initial Solar Reflectance	0.79	0.60	Solar Reflectance (Initial)	0.79	0.60
Aged Solar Reflectance (3 years)	0.78	0.54	Solar Reflectance (Weathered)	0.68	0.55
Cleaned prior to aged test?	Yes	No	Thermal Emittance (Initial)	0.85	0.81
Initial Emittance	0.85	0.81	Thermal Emittance (Weathered)	0.83	0.84

LEED	Test Method	White	Tan	Gray
Solar Reflectance	ASTM E903	0.81	0.63	0.37
Thermal Emittance	ASTM E408	0.95	0.95	0.95
Solar Reflectance Index (SRI)	ASTM E1980	102	77	43

S723-RFS-012

Firestone UltraPly™ TPO

PREMIUM PROTECTION. PROVEN PERFORMANCE.



Firestone
BUILDING PRODUCTS

NOBODY COVERS YOU BETTER™

Reflects the Sun, Reduces Your Bills.

CALLED "COOL ROOFS" FOR THEIR ABILITY TO REFLECT THE SUN'S ENERGY, THERMOPLASTIC POLYOLEFIN (TPO) ROOFS COUPLED WITH INSULATION ARE AN IDEAL COMMERCIAL ROOFING SYSTEM BECAUSE OF THEIR PERFORMANCE, RELIABILITY AND THEIR ABILITY TO SIGNIFICANTLY REDUCE THE ROOF'S SURFACE TEMPERATURE. THE LIGHT-COLORED ROOFING MEMBRANE INCREASES INDOOR COMFORT AND SAVES ON ELECTRICITY BILLS BY REDUCING THE COST OF AIR CONDITIONING. COMPARED TO PVC ROOFING, TPO HAS BETTER PUNCTURE RESISTANCE, ESPECIALLY AGAINST HAIL, IS ENVIRONMENTALLY FRIENDLIER AND ALSO COSTS LESS.



WHY FIRESTONE ULTRAPLY TPO

Greater energy efficiency makes TPO the fastest growing, sustainable commercial roofing product available.

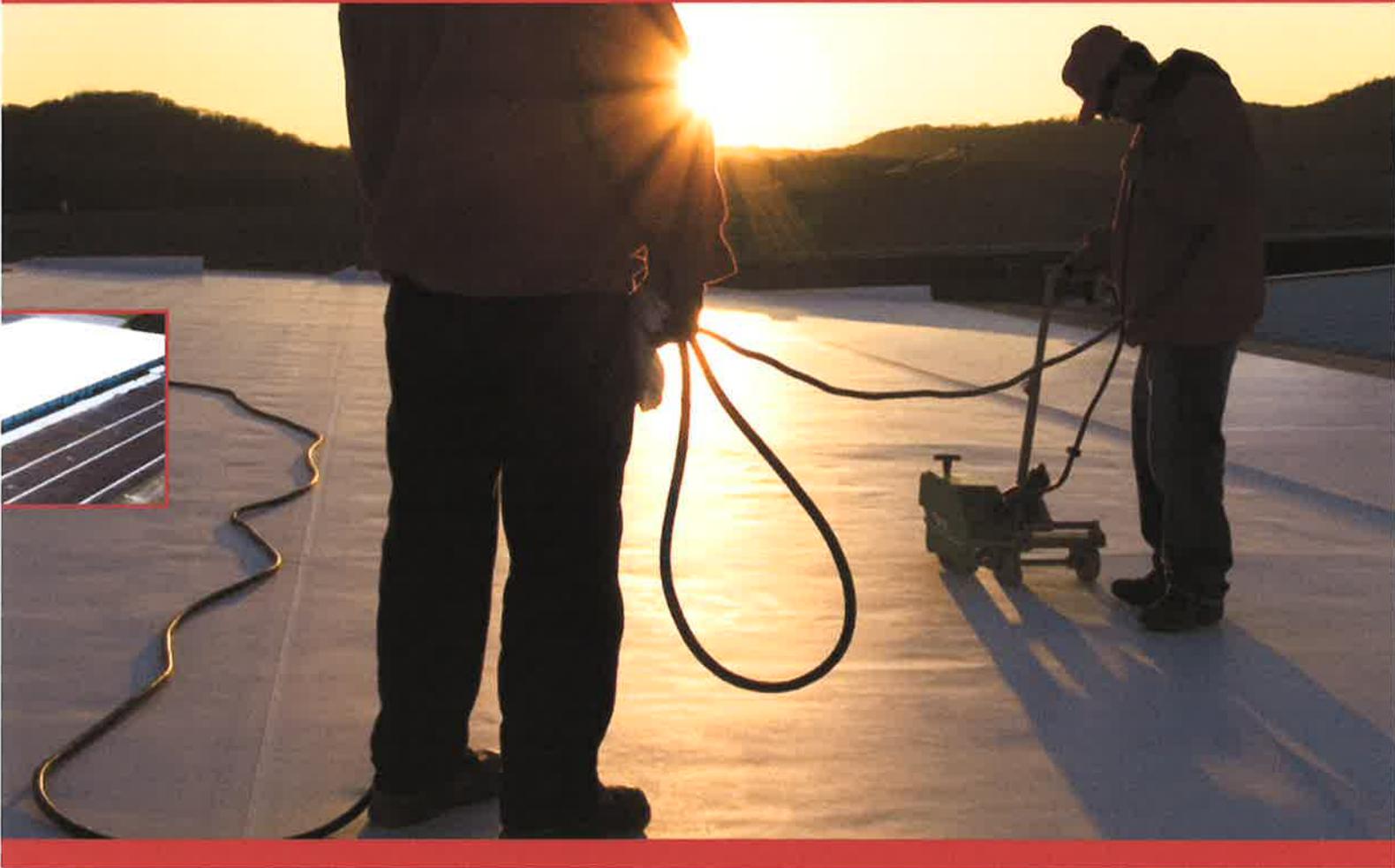
With nearly two decades of experience with TPO, Firestone proudly stands behind our UltraPly brand with our Red Shield® Warranty, which covers your roof for up to 30 years. Additionally, our TPO formulation, introduced in 1998, is designed to provide excellent ozone and chemical resistance, ensuring long-term roof performance.

UltraPly TPO System Options • Installed as mechanically-attached, fully-adhered and ballasted systems
• Available in 8', 10' and 12'4" widths • Your choice of white, tan or gray • Designed for low-slope application

Legendary warranty 30-year Platinum™, 25-year Medallion™ and 5-20 year Red Shield Warranties stand alone in the industry. No other manufacturer has the resources to match this guarantee



UltraPly™ TPO



ENHANCED ENERGY EFFICIENCY

White reflective surface exceeds the EPA's ENERGY STAR® requirements. White, tan and gray are listed with the Cool Roof Rating Council. Plus, white and tan are compliant with California's Title 24 Energy Efficiency Building Standards and can be used to gain credits with LEED® (Leadership in Energy and Environmental Design).

LONG-LASTING PERFORMANCE

Resists degradation from ultraviolet (UV) radiation and ozone. Guards against erosion from harmful chemicals and microbial growth, performing at more than three times the ASTM International standard for weathering resistance.

LESS ENVIRONMENTAL IMPACT

Firestone's manufacturing plants are ISO-9001 certified and located to provide nationwide coverage. Firestone UltraPly TPO can add LEED® points to the design, construction, operation and maintenance of a commercial building. Plus, the proximity of product availability reduces greenhouse gas emission and contributes to energy conservation. Firestone UltraPly TPO does not contain chlorinated or halogenated components.

EXCELLENT DURABILITY AND STRENGTH

Average thickness over scrim of 20- and 25-mils on the 45- and 60-mil products, respectively, provides enhanced puncture, tear and abrasion resistance.

EXCELLENT WIND UPLIFT RESISTANCE

Firestone Wide-Weld™ TPO seaming technology creates a full-width seam extending on both sides of the seam attachment. This process allows uplift forces to be distributed uniformly along all edges of the fastening system for improved wind resistance.



F i r e s t o n e U l t r a P l y [™] P

The Exceptional Long-Term Value for Building Owners

30-Year Warranty. 30-Year Peace of Mind.

FOR DURABILITY AND DEPENDABILITY, ULTRAPLY PLATINUM TPO DELIVERS. FIRESTONE'S ULTRAPLY PLATINUM TPO SYSTEM CAN BE MECHANICALLY ATTACHED OR FULLY ADHERED, GIVING YOU ADDED VERSATILITY. ADDITIONALLY, THE WHITE, REFLECTIVE SURFACE EXCEEDS ENERGY STAR® STANDARDS FOR ENERGY SAVINGS IN WARM CLIMATES, MAKING IT AN EXCEPTIONAL VALUE NO MATTER HOW YOU LOOK AT IT.



While our UltraPly Platinum TPO is already backed by an exceptional 30-year warranty, it can be further enhanced through the use of Firestone HailGard™ insulation to protect against nature's harshest elements including 2" hail, 100 mph winds and accidental punctures. This reduces roof maintenance and replacement expenses by extending roof life.

ULTRAPLY PLATINUM TPO SYSTEM BENEFITS

- 80-mil thick reinforced membrane
- 30-year warranty
- Exceeds EPA's ENERGY STAR® requirements
- Excellent field seams and high wind ratings
- No chlorinated or halogenated components

MULTIPLE COVERAGE TYPES AVAILABLE

- Puncture: covers incidental punctures
- Puncture/hail: covers punctures of up to 2" diameter hail
- Puncture/hail/wind: covers punctures, hail and 100 mph wind

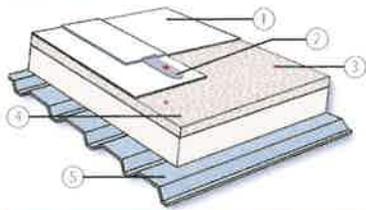
PATENTED WIDE-WELD™ SEAMING TECHNOLOGY

- Superior strength for high wind areas
- Higher wind uplift ratings than traditional single-weld systems
- Full width seam distributes uplift forces uniformly

l a t i n u m [™] T P O S y s t e m

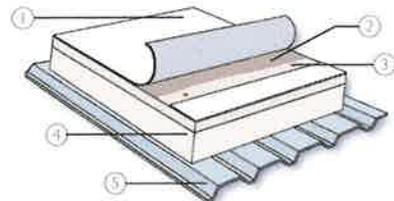


UltraPly TPO Platinum Mechanically Attached



1. Firestone UltraPly Platinum TPO with Wide-Weld™ Seam Technology
2. Firestone Batten Strip and Fasteners
3. Firestone HailGuard™ Fasteners
4. Firestone HailGuard Insulation
5. Roof Deck

UltraPly TPO Platinum Fully Adhered



1. Firestone UltraPly Platinum TPO with Wide-Weld Seam Technology
2. Firestone UltraPly TPO Bonding Adhesive
3. Firestone HailGuard Fasteners
4. Firestone HailGuard Insulation
5. Roof Deck

Resista™ Polyiso Insulation The best Polyiso Insulation Board just got better.



New Resista Polyiso Insulation Board is rewriting the specs on what you think you know about direct-to-deck insulation. Ask your Firestone Sales Representative for more information.

Firestone UltraPly™ TPO XR

An Easy Choice for Greater Versatility and Strength

WHETHER YOU'RE PUTTING ON A NEW ROOF, OR COVERING YOUR EXISTING SYSTEM, ULTRAPLY TPO XR IS THE IDEAL CHOICE.



With a backing of eight-ounce, non-woven polyester fleece, Firestone UltraPly TPO XR offers an additional external reinforcement for remarkable puncture resistance. It combines the attributes of TPO with the great adhesion of fleeceback. The external polyester fleece enables installation with either hot asphalt or Firestone XR Bonding Adhesive. Plus, it provides excellent resistance to common rooftop chemicals and UV rays, through outstanding reflectivity, which can help you obtain LEED® points.

ULTRAPLY TPO XR BENEFITS

- Available in two membrane options to fit your needs. *UltraPly XR 100 (45-mil) & UltraPly XR 115 (60-mil)*
 - Accommodates installation to a variety of substrates
 - Superior cut and puncture resistance
- Resists UV rays, many rooftop chemicals and microbial growth
- Can be used for new roof as well as retrofit applications

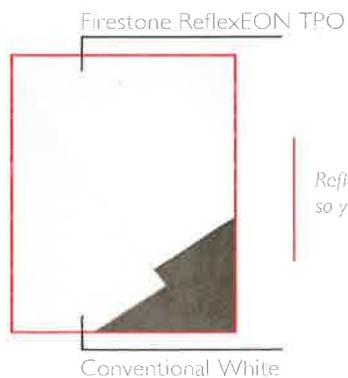
Firestone ReflexEON™ TPO

A Brighter, More Reflective Membrane = Greater Energy Efficiency

UNSURPASSED SOLAR REFLECTIVITY IN THE INDUSTRY MAKES
REFLEXEON TPO THE EFFICIENT CHOICE.



Light-colored roofs reflect UV radiation and improve a building's energy efficiency. ReflexEON TPO has the highest solar reflectivity of any TPO roofing membrane after 3 years of aging as tested by the Cool Roof Rating Council (CRRC). Its enhanced formulation provides uncompromised weatherability and durability year after year.



ReflexEON TPO is significantly brighter than standard TPO membrane, so you can reduce your energy bills even more.

F a s t e n i n g S y s t e m s , I n s u



Firestone Ultraply™ TPO InvisiWeld™ System

NON-PENETRATING FASTENING SYSTEM

The patented InvisiWeld system uses advanced technology to mechanically install TPO roofs without fasteners penetrating the UltraPly TPO membrane. This results in considerable savings in labor and material costs.



In a short 2-step process, UltraPly TPO InvisiWeld plates are used to attach the Firestone insulation or cover board to the roof deck. Then the TPO-coated plates are welded to the underside of the UltraPly TPO membrane through patented heat induction technology.

l a t i o n a n d C o v e r B o a r d s



Firestone Polyiso Insulation & Cover Board

FIRESTONE ISO 95+™ GL POLYISO FLAT & TAPERED INSULATION

THE LIGHTWEIGHT, EASY-TO-HANDLE INSULATION

ISO 95+ GL Insulation has the highest R-Value rating per inch, and can be attached with hot asphalt or low-rise foam adhesive to various substrates, or mechanically fastened with Firestone fasteners and plates. Meets UL I256 and FM 4450 requirements for direct-to-steel deck assemblies.



FIRESTONE ISOGARD™ HD COVER BOARD

ADDED PROTECTION FOR ANY ROOF

ISOGARD HD Cover Board combines impact resistance, energy savings and ease of installation in a single, durable product. It has the highest thermal performance of any 1/2" insulation cover board product on the market, plus provides greater UL fire ratings, greater structural strength, excellent wind uplift performance and more.

Red is the New Green

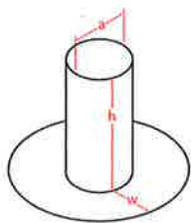
THE FIRESTONE ENVIRO-READY™ ROOFING SYSTEM WITH FIRESTONE WARRANTY COVERAGE ALLOWS BUILDING OWNERS TO INSTALL A HIGH-QUALITY CONVENTIONAL ROOF TODAY AND EASILY UPGRADE IT TO GREENER ROOFING TECHNOLOGIES—SUCH AS DAYLIGHTING SYSTEMS OR PV PANELS—UP TO 7 YEARS INTO THE FUTURE.



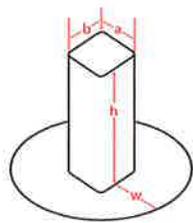
ULTRAPLY™ TPO CUSTOM ACCESSORIES

NO TWO ROOFS ARE THE SAME. FOR THOSE WITH UNIQUE ROOF DESIGNS AND ELEMENTS, IT PAYS TO HAVE CUSTOMIZED ULTRAPLY TPO ACCESSORIES FROM A COMPANY YOU CAN TRUST. ALL OF OUR STANDARD AND CUSTOM TPO ACCESSORIES ARE BRANDED WITH THE FIRESTONE NAME AND ARE COVERED IN THE FIRESTONE WARRANTY. THESE MADE-TO-ORDER ACCESSORIES CAN SAVE TIME AND MONEY, WITH A VARIETY OF OPTIONS DESIGNED TO ENABLE A PROFESSIONAL INSTALLATION ON EVERY PROJECT.

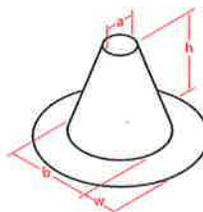
Available Custom Accessories:



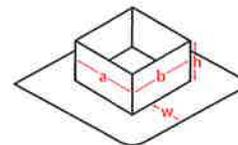
Round Pipe Boot



Square Boot



Coned Boot



Curb Flashing

The Firestone Difference

One Source. Many Choices.

SERVICE, STATE-OF-THE-ART PRODUCTS, EXPERTISE – THESE ARE JUST A FEW REASONS WHY CONTRACTORS, BUILDING OWNERS, ARCHITECTS AND SPECIFIERS HAVE TRUSTED FIRESTONE BUILDING PRODUCTS FOR THEIR ROOFING NEEDS. FIRESTONE ROOFING SYSTEMS CONSISTENTLY DELIVER ON TWO CRITICAL NEEDS ALL BUILDING OWNERS DEMAND: OUTSTANDING DURABILITY AND LOW LIFE-CYCLE COST. TRUST FIRESTONE TO BRING YOU THE DEPTH OF RESOURCES TO ENSURE THE RIGHT SYSTEM FOR YOUR NEEDS, WHETHER FOR ONE BUILDING OR MANY.

MANUFACTURING

21 facilities throughout North America

PRODUCTS

Offers single-ply and APP/SBS modified bitumen roofing systems, metal roofing systems, polyiso insulation and a full line of accessories

QUALITY CONTROL

Each manufacturing facility meets or exceeds ISO 9001

EXPERTISE

Installation experts and product support, plus a wide-ranging network of contractors, distributors and field sales representatives

STABILITY AND INNOVATION

More than 100 years of success in rubber and polymer technology

RESOURCES

Part of Bridgestone/Firestone, the world's largest tire and rubber company offering a broad depth of raw materials availability for your convenience

R&D COMMITMENT

Annually invests millions of dollars in research and development

GREEN FOCUSED

Plays a global role in protecting the environment by focusing on recyclability, reflectivity, conservation and sustainability including the elimination of PVC from our product line. Each manufacturing facility meets or exceeds ISO 14001

Firestone

BUILDING PRODUCTS

NOBODY COVERS YOU BETTER™

Firestone Building Products

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Note: This brochure is meant only to highlight Firestone's products and specifications. Information is subject to change without notice. ALL products and specifications are listed in approximate weights and measurements. For complete product and detail information, please refer to the Technical Manual. Firestone takes responsibility for furnishing quality materials which meet Firestone's published product specifications. As neither Firestone itself nor its representatives practice architecture, Firestone offers no opinion on, and expressly disclaims any responsibility for, the soundness of any structure on which its products may be applied. If questions arise as to the soundness of a structure or its ability to support a planned installation properly, the owner should obtain opinions of competent structural engineers before proceeding. Firestone accepts no liability for any structural failure or for resultant damages, and no Firestone representative is authorized to vary this disclaimer.



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Eastern Oregon Regional Airport Pendleton, Oregon

Specifications

OWL Building



OWL Building

At airport

Firestone Single-Ply Retrofit Solutions for Metal Roofs



BEFORE



AFTER

THE PROBLEM

Over time, metal roofing systems can rust, corrode and develop leaks around joints and fasteners. These issues can develop from poor installation or normal weathering. Many times, leaky metal roofs are patched with caulk, tape or coating—however, these are often only short-term fixes.

THE SOLUTION

Firestone single-ply retrofit solutions offer a wide range of roofing materials and attachment methods that can be installed directly over worn metal roofs. These solutions extend the life of the existing roof up to 20 years. They also provide the opportunity to install insulation which can improve the overall energy efficiency of the building.

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One Solution—Many Options

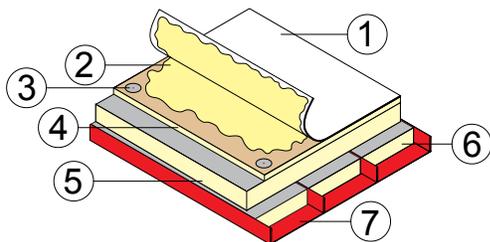
Firestone Building Products is your single source for metal retrofit roofing solutions. From insulation to coverboard to membrane, Firestone manufactures the products you need for consistent, reliable results.

Metal retrofit is a cost-effective solution and provides many benefits, including:

- Existing deck is reused, eliminating expensive tear-off
- Highly-reflective membrane options include EcoWhite™ EPDM and UltraPly™ TPO
- Improved energy efficiency through the addition of insulation
- Installed by licensed Firestone contractors
- Red Shield® Warranty protection

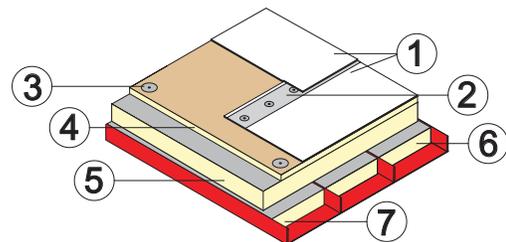
One of the biggest advantages of Firestone single-ply retrofit solutions is the broad selection of Firestone products and installation methods available. These options allow you to choose the system that works best with your structure, budget and environment.

Fully Adhered Systems



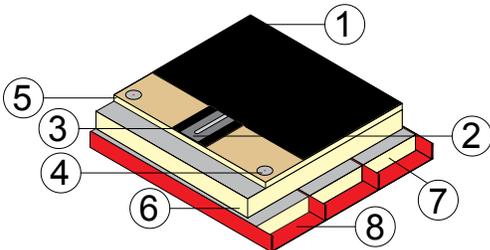
- | | |
|---|-----------------------------|
| 1) RubberGard™ EPDM, EcoWhite EPDM or UltraPly TPO membrane | 4) ISOGARD™ HD cover board |
| 2) Bonding adhesive | 5) ISO 95+™ GL insulation |
| 3) Fastener and plate | 6) Insulation fill material |
| | 7) Existing metal roof deck |

Mechanically Attached Systems



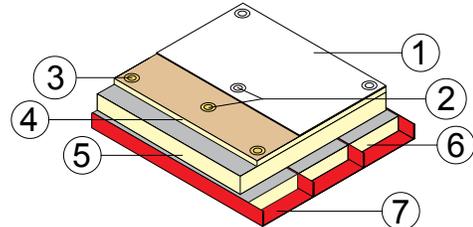
- | | |
|---|-----------------------------|
| 1) RubberGard EPDM or UltraPly TPO membrane | 4) ISOGARD HD cover board |
| 2) Seam plates and fasteners or batten strips | 5) ISO 95+ GL insulation |
| 3) Fastener and plate | 6) Insulation fill material |
| | 7) Existing metal roof deck |

RubberGard R.M.A. System



- | | |
|---|-----------------------------|
| 1) RubberGard EPDM membrane | 5) ISOGARD HD cover board |
| 2) Seam plates and fasteners or batten strips | 6) ISO 95+ GL insulation |
| 3) QuickSeam™ R.M.A. strip | 7) Insulation fill material |
| 4) Fastener and plate | 8) Existing metal roof deck |

InvisiWeld™ System



- | | |
|---|-----------------------------|
| 1) UltraPly TPO membrane | 4) ISOGARD HD cover board |
| 2) InvisiWeld plates — fastened into the roof purlins and adhered to the underside of the roof membrane | 5) ISO 95+ GL Insulation |
| 3) Fastener and plate | 6) Insulation fill material |
| | 7) Existing metal roof deck |

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 250 West 96th St., Indianapolis, IN 46260
 Corporate Office: 1-800-428-4442 • 317-575-7000
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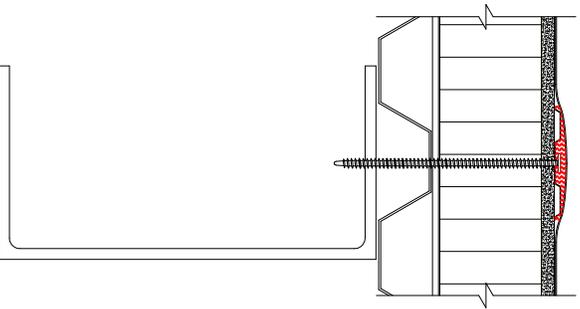
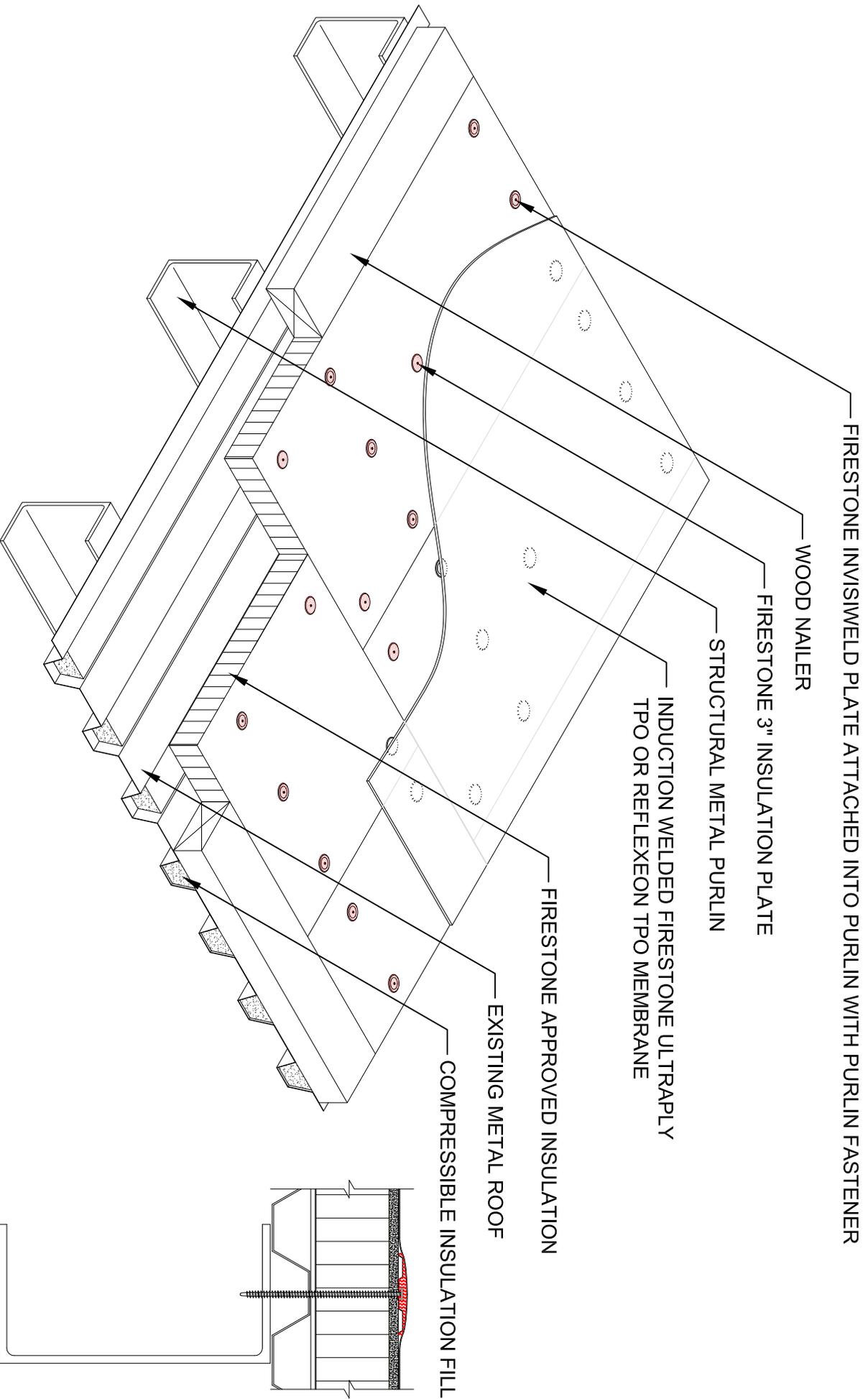
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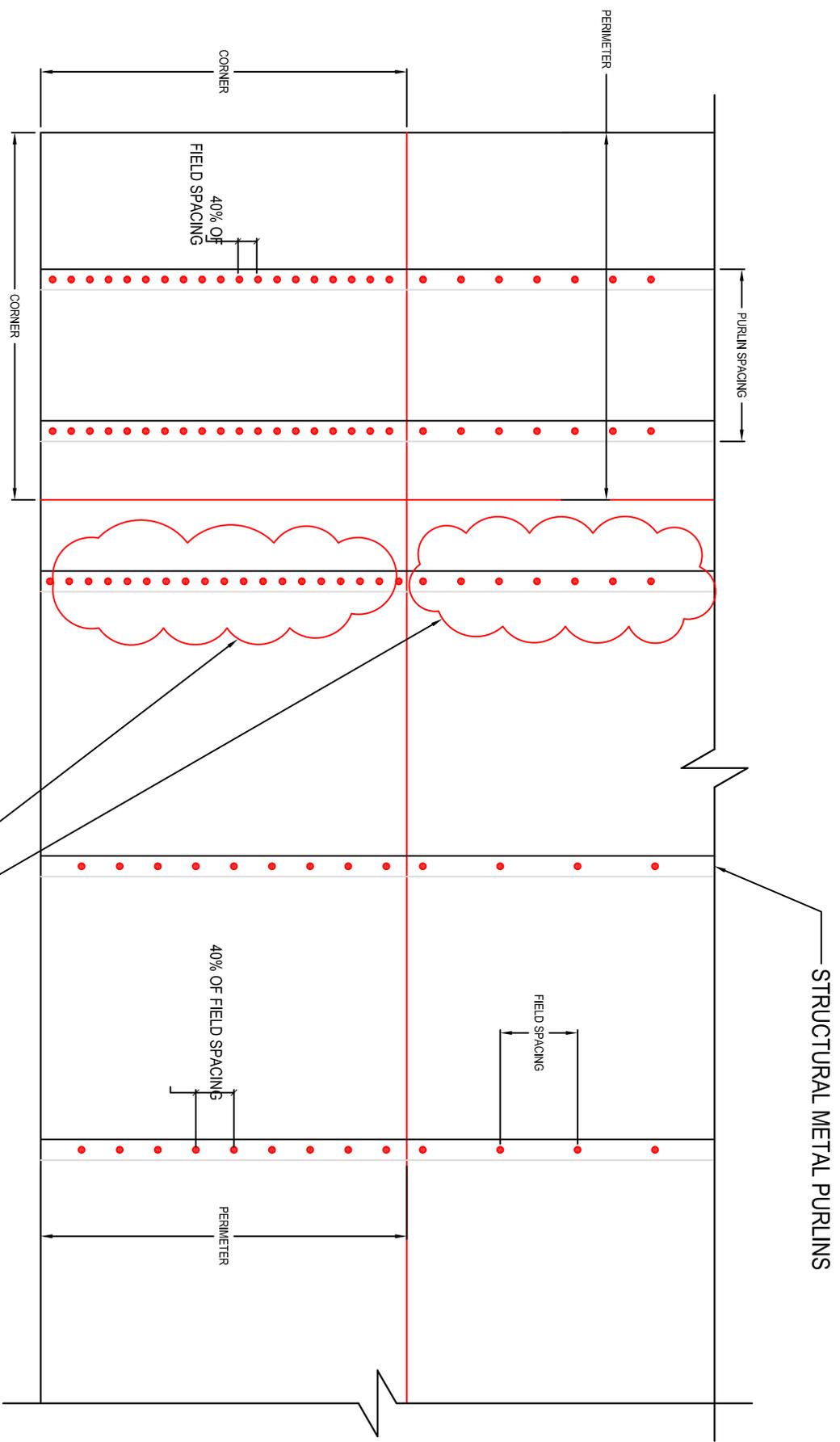
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FIRESTONE ULTRAPLY TPO INVISIWELD METAL ROOF RETROFIT ASSEMBLY
ULTRAPLY™ TPO ACCEPTABLE SYSTEMS: FIRESTONE ULTRAPLY TPO INVISIWELD SYSTEM

ISSUE / REVISION
 DATE:
 07/25/2014

MAXIMUM WARRANTY: 20 YEARS
 DETAIL NO.
UT-IW-3

NOT TO SCALE



NOTE: THE WIDTH OF THE CORNERS AND PERIMETERS IS DEFINED AS THE SMALLER OF: 0.1 TIMES THE BUILDING LESSER PLAN DIMENSION; 0.4 TIMES THE EAVE HEIGHT SUBJECT TO A MINIMUM WIDTH OF 3 FEET.

NOTE: VIEW SHOWN IS TOP VIEW OF THE OUTSIDE CORNER OF ROOF

DEFAULTS TO PERIMETER FASTENING RATE
 DEFAULTS TO CORNER FASTENING RATE

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FIRESTONE ULTRAPLY TPO INVISIWELD
 METAL ROOF RETROFIT PURLIN FASTENING RATES
 ULTRAPLY[™] TPO ACCEPTABLE SYSTEMS: FIRESTONE ULTRAPLY TPO INVISIWELD SYSTEM

ISSUE / REVISION
 DATE:
 07/25/2014

MAXIMUM WARRANTY: **20 YEARS**
 DETAIL NO.
UT-IW-4

NOT TO SCALE