



BUILDING PRODUCTS

March 3, 2006

30 year Warranty Design Criteria

Mechanically Attached ReflexEON Platinum TPO

General Requirements - Quick Spec
Platinum Warranty, Basic System

Slope Requirements

Minimum 1/8" slope recommended to promote positive drainage. Firestone recommends a minimum of 1/4" slope. Maximum slope 4:12.

Acceptable Decks

Refer to the Firestone Technical Database for minimum pullout requirements.

1. Minimum 22 gauge(0.76mm) Steel
 2. Minimum 3,000psi (20684kPa) Structural Concrete
 3. Minimum 1/2" (12.7mm) Plywood
 4. Wood Planks with min. 3/4" Thickness
 5. Fibrous Cement and Gypsum
- Contact Firestone for decks not listed.

Building Height Limitations

Mechanically Attached systems are restricted to building heights of:120' (36.6m) or less for 8' panels

Membrane Requirements

Minimum .080" ReflexEON Platinum.
All seams to be made using Firestone 5" Wide-Weld system.



Construction Type

New construction or complete tear-off to deck with any damaged support materials removed and replaced in kind.

Use of Air Barrier

An air barrier is required for projects with large wall openings that are greater than 10% of a total wall area that can be left open in a storm. Criteria to be determined based upon Firestone's Review.

Edge Metal Systems

1. Firestone AnchorGard Platinum fascia or Coping system component designed to work with the Platinum system per ANSI/SPRI ES-1 standard.
2. Other ReflexEON Platinum details shown in the Firestone Technical Database.

Other Requirements

1. As-Built Projects not permitted. Firestone Pre-Installation Notice 14 days prior to project start, be submitted, reviewed and approved.
2. System installation per Firestone Technical Database Manual.
3. Welded Details only.
4. The Firestone Warranty does not cover products not supplied by Firestone Building Products.
5. "T" joints must be sealed with Firestone ReflexEON "T" joint covers.

Mechanically Attached Systems

Membrane Attachment	Perimeter Requirements
Firestone UltraPly .080" 5' and 8' panels attached with metal or polymer battens and HD fasteners at 6" o.c.	55 mph warranty: Refer to Firestone Wind Design Guide for perimeter attachment. For warranty speeds in excess of 55 mph contact Firestone Technical Services

Insulation Attachment for Mechanically Attached Systems

ISO 95+ (Top Layer)	New Construction or Reroof with No Air Barrier	New Construction or Reroof with Air Barrier
		Firestone HD fasteners and Insulation Plates
1.0"-1.9"	5 per 4'x 8' Board	16 per 4'x 8' Board
2.0"-4.0"	5 per 4'x 8' Board	12 per 4'x 8' Board

Detail Description for Mechanically Attached Systems

Wall Terminations	Firestone Termination Bar with reglet or surface mounted counterflashing.
Curbs/Parapets	Curbs longer than eight (8) feet on any side must be anchored using QuickSeam RPF Strip. Where this is not practical, membrane is mechanically terminated at curb and curb may be flashed using 60 mil ReflexEON Membrane or UltraPly 18" Curb Flashing. In either case, the base lap shall be completed with 5" Wide Weld seaming.
Corners	Flashed with ReflexEON "T"-joint cover and ReflexEON Inside/Outside Corner Flashing
Roof Edges/Parapets	Firestone AnchorGard Platinum System, Coping or other – ANSI/SPRI ES-1 Tested system
Penetrations	As shown in the Firestone ReflexEON Platinum details. Firestone TPO (6") Penetration Pockets or ReflexEON Pipe Flashings may be used with the flanges stripped in using ReflexEON .080".
Walkways	Constructed using Firestone TPO ECO Walkway Pad, or Pavers with sacrificial membrane layer or Red Shield Walkways

This sheet is intended to be a summary guide for the installation of a roofing system that will qualify for an ReflexEON Platinum 30-year Firestone Red Shield Limited Warranty with a 55 mph wind speed coverage. ReflexEON Platinum systems also offer varying levels of coverage including puncture, hail and 100-mph winds. These warranties require varying insulation substrates and attachments depending on the coverage desired. Contact your local Firestone Sales Representative for current requirements. Installation specifications are subject to change. Review Firestone Technical Database website: www.firestonebpc.com and Technical Bulletins for current updates.



March 3, 2006



30 year Warranty Design Criteria
Fully Adhered ReflexEON Platinum TPO

General Requirements - Quick Spec
 Platinum Warranty, Basic System

Slope Requirements

Minimum 1/8" slope recommended to promote positive drainage. Firestone recommends a minimum of 1/4" slope. Maximum slope: none.

Acceptable Decks

Refer to the Firestone Technical Database for minimum pullout requirements.

1. Min. 22 gauge Steel
2. Min. 3,000 psi Structural Concrete
3. Minimum 1/2" Plywood
4. Wood Planks with min. 3/4" Thickness
5. Fibrous Cement and Gypsum

Contact Firestone for decks not listed.

Building Height Limitations

Fully Adhered ReflexEON Platinum Systems are restricted to building heights of 250' (76.2m) or less.

Membrane Requirements

Minimum .080" ReflexEON Platinum membrane. "T" joints must be sealed with Firestone ReflexEON TPO "T" joint covers or unsupported flashing membrane. All seams to be made using Firestone 1.5" Single Weld system. (Hand Welds must be a minimum of 2')

Construction Type

New construction or complete tear-off to deck with any damaged support materials removed and replaced in kind.

Use of Air Barrier

An air barrier is required for projects with large wall openings that are greater than 10% of a total wall area that can be left open in a storm. Criteria to be determined based upon Firestone's Review.

Edge Metal Systems

1. Firestone AnchorGard Platinum fascia or Coping system component designed to work with the Platinum system tested per ANSI/SPRI ES-1 standard.
2. Other ReflexEON Platinum details shown in the Firestone Technical Database.

Other Requirements

1. As-Built Projects not permitted. Firestone Pre-Installation Notice 14 days prior to project start, be submitted, reviewed and approved.
2. System installation per Firestone Technical Database information and details.
3. Welded exposed membrane Details only.
4. The Firestone Warranty does not cover products not supplied by Firestone Building Products.

Insulation Attachment for Fully Adhered System

Insulation Thickness*	New Construction	New Construction with Air Barrier
1.0"(min) - 4.0"	16 per 4'x 8' Board	16 per 4'x 8' Board
	HailGard(min 1-1/2 use HailGard Fasteners. Use HD Fasteners and Insulation plates for ISO 95+ or DensDeck Firestone Polymer Fastener and Polymer Plates for Fibrous Cement or Gypsum(pre-drilling may be required)	

Detail Description for Fully Adhered System

Wall Terminations	Firestone Termination Bar with reglet or surface mounted counterflashing.
Curbs/Parapets	Curbs longer than eight (8) feet on any side must be anchored using QuickSeam RPF Strip. Where this is not practical, membrane is mechanically terminated at curb and curb may be flashed using 60 mil ReflexEON Membrane or UltraPly 18" Curb Flashing. In either case, the base lap shall be completed with 5" WideWeld seaming.
Corners	Flashed with ReflexEON Inside/Outside Corner Flashing and ReflexEON "T"-joint cover
Roof Edges/Parapets	Firestone AnchorGard Platinum System, Coping or other – ANSI/SPRI ES-1 Tested system or Firestone Details
Penetrations	As shown in the Firestone ReflexEON Platinum details. Firestone TPO Penetration Pocket or ReflexEON Pipe Flashings may be used with the flanges stripped in using ReflexEON .080".
Walkways	Use Firestone TPO ECO Walkway Pad, or Firestone Pavers with sacrificial membrane layer or Red Shield Walkways

This sheet is intended to be a summary guide for the installation of a roofing system that will qualify for an ReflexEON Platinum 30-year Firestone Red Shield Limited Warranty with a 55 mph wind speed coverage. ReflexEON Platinum systems also offer varying levels of coverage including puncture, hail and 100-mph winds. These warranties require varying insulation substrates and attachments depending on the coverage desired. Contact your local Firestone Sales Representative for current requirements. Installation specifications are subject to change. Review Firestone Technical Database website: www.firestonebpc.com and Technical Bulletins for current updates.