



1. Firestone UltraPly TPO Membrane
2. Mechanical Attachment Method
3. Mechanically Attached or Adhered Cover Board (Optional)
4. Mechanically Attached or Adhered Insulation
5. Steel Deck

Consult Firestone Technical Specifications, Guides and Details at [www.firestonebpco.com](http://www.firestonebpco.com)

**Slope Requirement**

Positive slope required for warranty.

**Construction Type**

New construction, complete tear-off, or recover with any wet or damaged materials removed prior to installation.

**Building Height Limitation**

Firestone UltraPly TPO Mechanically Attached Systems are limited to buildings 120' (36.6 m) or less.

**Use of Air Barrier**

An air barrier is required for projects with large wall openings greater than 10% of the total wall area. If air barrier is used, use the fully adhered insulation attachment rates.

**Base Tie-Ins**

Must be attached to substrates which provide a minimum of 200 lbf (1 kN) in any direction.

**Increased Wind Speed and Codes**

Any wind speed coverage exceeding 55 mph (88 km/h) or projects with code requirements must be reviewed by a Firestone Technical Services Advisor.

**Deck Requirement**

Minimum 22 Gauge Steel

**Fastener Type**

- Firestone Heavy Duty Fastener
- Firestone Heavy Duty Plus Fastener
- Firestone IsoGard™ HG / HailGard™ Fastener (with IsoGard HG / HailGard Composite Board or OSB only)

**Insulation Adhesive\***

- Firestone I.S.O. Twin Pack™ Insulation Adhesive
- Firestone I.S.O. Spray™ R Insulation Adhesive
- Firestone I.S.O. Fix™ II Insulation Adhesive
- Firestone I.S.O. Stick™ / Twin Jet Insulation Adhesive

\*Note: Max. 4' x 4' boards must be used when attaching insulation with adhesives. Cleaning of the metal deck may be required to remove processing oils from manufacturing.

**Adhesive Attachment**

- Bead Spacing: F: 12", P: 12", C: 12"
- Full Application (I.S.O. Spray R Insulation Adhesive)

**Membrane Requirement**

- UltraPly TPO, Any Thickness

**Seaming Requirement**

Firestone Single Weld System (use robot welder). Joint covers are required at all T joints (.060 membrane) and at angle changes 1:12 or greater (any thickness).

**Membrane Attachment**

**Max. 15 Year Warranty:**

- Maximum 12' Row Spacing, Fasteners Spaced Maximum 12" o.c.

**20 Year Warranty: UltraPly TPO .045":**

- Maximum 12' Row Spacing, Fasteners Spaced Maximum 6" o.c.

**20 Year Warranty: UltraPly TPO, Min .060":**

- Maximum 12' Row Spacing, Fasteners Spaced Maximum 12" o.c.

**Edge Metal System**

- Firestone EdgeGard™ System
- Firestone AnchorGard™ System
- Firestone Coping System
- Firestone Termination Bar
- Firestone Aluminum Drain Bar

**Insulation Mechanical Attachment Rates for Standard 55 mph Wind Speed**

**Insulation (Top Layer) and Optional Coverboard 4'X8'**

1.0" to 1.4" Firestone ISOGARD™ GL / ISO 95+ GL or ISOGARD GC / Resista Insulation	5	1/4" SECUROCK® Gypsum Fiber Board	5
1.5" to 1.9" Firestone ISOGARD GL / ISO 95+ GL or ISOGARD GC / Resista Insulation	5	1/2" SECUROCK Gypsum Fiber Board	5
2.0" to 4.0" Firestone ISOGARD GL / ISO 95+ GL or ISOGARD GC / Resista Insulation	5	5/8" SECUROCK Gypsum Fiber Board	5
1.5" to 1.9" / 2.0" to 4.0" Firestone ISOGARD HG / HailGard Composite	5	1/4" DensDeck® Roof Board / DensDeck Prime Roof Board	5
Firestone ISOGARD HD Composite Board	5	1/2" DensDeck Roof Board / DensDeck Prime Roof Board	5
Firestone ISOGARD HD Cover Board	5	5/8" DensDeck Roof Board / DensDeck Prime Roof Board	5
1/2" Structodek® High Density Wood Fiber Board (max. 15-year warranty)			5

**Detail Description**

<b>Wall Terminations:</b>	Firestone Termination Bar with optional surface mounted or reglet inserted counterflashing may also be used in accordance with current Firestone details.
<b>Curb &amp; Wall Flashings:</b>	Curbs, walls, and expansion joints must be anchored with appropriate base tie-in detail, using UltraPly QuickSeam Reinforced Perimeter Fastening (RPF) Strip or TPO seam plates (see current details for alternate base tie-in options). Curbs and walls must be flashed using minimum 0.045" UltraPly TPO Membrane, UltraPly TPO Flex Adhered or UltraPly TPO 18" Curb Flashing. Flashings may be sealed with welded details or QuickSeam products (see UltraBlend details) where acceptable, and may include UltraPly TPO Coated Metal.
<b>Corners:</b>	UltraPly TPO Inside/Outside Corners or QuickSeam products (see UltraBlend details).
<b>Roof Edges/Parapets:</b>	Firestone AnchorGard or EdgeGard Fascia, Drain Bar systems, Firestone Coping System, UNA-EDGE System or UltraPly TPO Coated Metal.
<b>Penetrations:</b>	Flash with weldable UltraPly Pipe Flashing or UltraPly TPO Penetration Pocket, field fabricate with UltraPly TPO Unsupported Flashing, use QuickSeam products (see UltraBlend details) or use liquid flashing details.

**Notes:**

1. Only Firestone brand products are covered in a Red Shield warranty.
2. Refer to the Firestone Technical Database at [www.firestonebpco.com](http://www.firestonebpco.com) for additional information regarding UltraPly TPO Roof Systems.
3. DensDeck is a registered trademark of Georgia-Pacific Gypsum LLC.
4. It is the installing contractor's responsibility to follow applicable building codes.
5. SECUROCK is a registered trademark of USG Corporation.
6. Structodek is a registered trademark of Blue Ridge Fiberboard, Inc