

## TPO Membrane Attachment Table for Mechanically Attached Systems

(10' field sheets, except when noted)

| Deck Type   | Minimum Pull-Out Values (lbs) | Fastener Type | Plate              | Penetration         | Standard Pattern | 90 psf* Pattern |
|---|-------------------------------|---------------|--------------------|---------------------|------------------|-----------------|
| ½" Plywood  | 350                           | #14           | 2 3/8" barbed      | Through the deck    | 6" o.c.          |                 |
|   | 350                           | #14           | 2" double barbed   | Through the deck    | 6" o.c.          |                 |
| Structural Concrete                                   | 700                           | #14           | 2 3/8" barbed      | 1" into the deck    | 12" o.c.         | 6" o.c.         |
|   | 700                           | #14           | 2" double barbed   | 1" into the deck    | 12" o.c.         | 6" o.c.         |
|   | 900                           | Spike         | 2 3/8" barbed      | 1" into the deck    | 12" o.c.         | 6" o.c.         |
|   | 900                           | Spike         | 2" double barbed   | 1" into the deck    | 12" o.c.         | 6" o.c.         |
|   | 900                           | Spike         | 2 ¾" double barbed | 1" into the deck    | 12" o.c.         | 12" o.c.        |
| Lightweight Insulating Concrete, 22 ga. Standard Form | 450                           | #15           | 2 3/8" barbed      | ¾" through the form | 12" o.c.         | 6" o.c.         |
|   | 450                           | #15           | 2" double barbed   | ¾" through the form | 12" o.c.         | 6" o.c.         |
|   | 350                           | #14           | 2 3/8" barbed      | ¾" through the form | 6" o.c.          |                 |
|   | 350                           | #14           | 2" double barbed   | ¾" through the form | 6" o.c.          |                 |
| Lightweight Insulating Concrete, 24 ga. standard form | 350                           | #15           | 2 3/8" barbed      | ¾" through the form | 6" o.c.          |                 |
|   | 350                           | #15           | 2" double barbed   | ¾" through the form | 6" o.c.          |                 |
|   | 350                           | #14           | 2 3/8" barbed      | ¾" through the form | 6" o.c.          |                 |
|   | 350                           | #14           | 2" double barbed   | ¾" through the form | 6" o.c.          |                 |
| Gypsum Concrete                                       | 400                           | Polymer Screw | 2" double barbed   | 1 ½" into the deck  | 9" o.c.          | 6" o.c.         |
|   | 400                           | Polymer Screw | 2" barbed          | 1 ½" into the deck  | 9" o.c.          | 6" o.c.         |
| Cementitious Wood Fiber                               | 300                           | Polymer Screw | 2" double barbed   | 1 ½" into the deck  | 6" o.c.          |                 |
|   | 300                           | Polymer Screw | 2" barbed          | 1 ½" into the deck  | 6" o.c.          |                 |

\*90 psf is attachment pattern to provide 90 lbs. per square foot of uplift pressure resistance and may equate to FM I-90, Refer to current FMRC Approval Guide. NOTE: For designing at elevated uplift pressures, please consult the current FMRC Approval Guide/ROOFNAV.