# **PERLOK#12 DP FASTENER**

## DESCRIPTION

PERLOK # 12 DP Fasteners are specifically engineered to secure insulation, coverboards, and base sheets to corrugated steel and wood substrates.

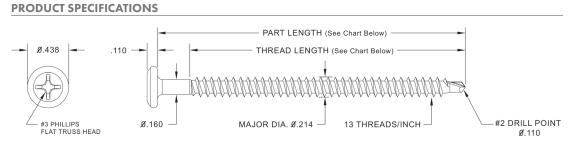
## ADVANTAGES

- Heavier shank and buttress thread diameter for increased pullout resistance and shear strength
- Epoxy coated for enhanced corrosion resistance
- Our exclusive double fluted self-drilling point with tapered entry thread design, quickly penetrates for superior drill speeds

## **TYPICAL PROPERTIES\***

| PROPERTY                    | VALUE                               |  |  |
|-----------------------------|-------------------------------------|--|--|
| Material                    | SAE C1022, heat treated             |  |  |
| Coating                     | Epoxy E-Coat                        |  |  |
| Fastener Head               | 1/4 inch Hex                        |  |  |
| Fastener Tip                | #2 Double flute self-drilling point |  |  |
| Thread Size                 | .214 in                             |  |  |
| Thread/Inch                 | 13                                  |  |  |
| Tensile Strength            | 2,500 lbf                           |  |  |
| Shear Strength              | 1,900 lbf (thread zone)             |  |  |
| <b>Corrosion Resistance</b> | <15% Red rust after 30 cycles       |  |  |
| Recycled content            | 20%                                 |  |  |

\* All values shown are nominal



## PACKAGING

| PART #  | FASTENER LENGTH |       | THREAD LENGTH* |      | PACKAGE  |        | QTY    |
|---------|-----------------|-------|----------------|------|----------|--------|--------|
|         | Inches          | мм    | Inches         | мм   | Quantity | Weight | PALLET |
| DP-1625 | 1 5/8           | 41.3  | Full           | 41.3 | 1,000    | 11.8   | 80,000 |
| DP-2250 | 2 1/4           | 57.2  | Full           | 57.2 | 1,000    | 16.2   | 80,000 |
| DP-2875 | 2 7/8           | 73.0  | Full           | 73.0 | 1,000    | 19.7   | 80,000 |
| DP-3250 | 3 1/4           | 82.6  | 2 7/8          | 73.0 | 1,000    | 21.5   | 80,000 |
| DP-3750 | 3 3/4           | 95.3  | 2 7/8          | 73.0 | 1,000    | 24.6   | 80,000 |
| DP-4500 | 4 1/2           | 114.3 | 3 7/8          | 98.4 | 1,000    | 28.8   | 60,000 |
| DP-5000 | 5               | 127.0 | 3 7/8          | 98.4 | 1,000    | 31.5   | 60,000 |
| DP-6000 | 6               | 152.4 | 3 7/8          | 98.4 | 1,000    | 37.1   | 60,000 |
| DP-7000 | 7               | 177.8 | 3 7/8          | 98.4 | 500      | 20.9   | 40,000 |
| DP-8000 | 8               | 203.2 | 3 7/8          | 98.4 | 500      | 23.9   | 40,000 |

\* All values shown are nominal. Thread length measured from tip of the drill point to end of the threads



Enlarged to show detail





## **PERLOK#12 DP FASTENER**

## **PERFORMANCE DATA\***

Average Ultimate Pullout Values for Wood Substrates

| SUBSTRATE | THICKNESS (Inches) |     |     |     |  |
|-----------|--------------------|-----|-----|-----|--|
|           | 7/16               | 1/2 | 5/8 | 3/4 |  |
| OSB       | 265                | 300 | 325 | 440 |  |
| Plywood   | —                  | 365 | 475 | 720 |  |

| SPF #2*       |                                 |  |  |
|---------------|---------------------------------|--|--|
| Including Tip | Excluding Tip                   |  |  |
| 700           | _                               |  |  |
|               | * lbf/inch of thread penetratio |  |  |

Average Ultimate Pullout Values for Corrugated Steel Decks at Various Yield Strengths

| THICKNESS | YIELD STRENGTH (ksi) |      |       |       |  |
|-----------|----------------------|------|-------|-------|--|
|           | 33.0                 | 36.5 | 80.0  | 102.0 |  |
| 18 Gauge  | 710                  | _    | 1,000 | 1,145 |  |
| 18 Gauge  | 540                  |      | 715   | 800   |  |
| 20 Gauge  | 355                  | —    | 505   | 580   |  |
| 22 Gauge  | 285                  | —    | 410   | 465   |  |
| 24 Gauge  | _                    | 230  | _     | _     |  |

\* NOTE: The physical properties listed above are presented at typical average values as determined by accepted ASTM test methods and are subject to normal manufacturing variation. Ultimate Pullout values must be reduced by a minimum safety factor of ≥ 3.0 to determine allowable working load.

### INSTALLATION

**For Steel and Wood Decks:** Using the #3 Phillips drive bit provided and a 0-2500 rpm screw gun, install the fastener into the deck. The fastener must penetrate the deck a minimum of <sup>3</sup>/<sub>4</sub> inch, as measured from the underside of the deck to the fastener tip. Care should be taken to orient the fastener perpendicular to the deck and not to overdrive the fastener to prevent damage to the insulation or membrane.

## PULLOUT TESTING

The strength of different roof decks can vary widely and can be adversely affected by moisture and other conditions. Therefore, it is recommended that a fastener pull test be conducted to help evaluate deck condition and fastener suitability. Contact Performance Roof Systems Technical Services to schedule testing.

## **APPROVED ACCESSORIES**

- PERLOK 3" Metal Insulation Plate
- PERLOK 3" Recessed Metal Insulation Plate



