

Drill-TecTM
NTB-1HWW
With Locking Wire Barbs
Data Sheet

Updated: 5/09



*Your Best and Safest ChoiceTM ...
Quality You Can Trust Since 1886!*

GYPSUM, TECTUM® & LIGHTWEIGHT DECKS

DRILL•TEC™

PRODUCT DESCRIPTION

The Drill-Tec™ NTB-1HWW is a glass-filled nylon auger fastener with a 1" head and locking wire barbs. It is designed to secure insulation and single-ply membrane to gypsum, all cementitious wood fiber decks (Permadeck, Insulrock, Tectum®, etc.) and certain lightweight concrete decks. Wire barbs prevent back-out and increase pull-out resistance in marginal decks. The NTB-1HWW may be used with a 3" steel plate for insulation attachment. For single-ply membrane attachment, use a 2" steel plate (with barbs), or batten bar. The NTB-1HWW is available in 2-1/2" to 10" lengths. The NTB-1HWW is Factory Mutual and Dade County approved.

APPLICATION

The Drill-Tec NTB-1HWW can be installed into Tectum® decks without pre-drilling. A pilot hole is required for gypsum, lightweight concrete, and some cementitious wood fiber. Use a 7/16", 1/2", or 9/16" drill bit. Diameter of drill bit is determined by pull-out test results. Hole depth must be 1/2" deeper than embedment. Minimum fastener embedment into the deck should be at least 1-1/2" (2" recommended). The NTB fastener should never penetrate the underside of the deck. The most effective method of engaging the wire barbs during installation is with the NTB Eliminator drill attachment. The use of a 3" plate is required when securing insulation. **Note:** Be careful not to overdrive the fastener, causing subsequent damage to the insulation facer.

NTB®-1HWW WITH LOCKING WIRE BARBS



Fast Facts

The Drill-Tec NTB-1HWW with 1" head and locking wire barbs is a glass-filled nylon auger fastener designed to secure insulation and single-ply membrane to gypsum, all cementitious wood fiber, Tectum® and certain lightweight concrete decks.

FEATURES & BENEFITS

- Locking wire barbs:
 - Prevent back-out
 - Increase pull-out resistance in marginal decks
- Thread design & large root diameter:
 - Increase pull-out resistance
 - Increase side shear strength
- Made from glass-filled nylon which:
 - Eliminates corrosion
 - Eliminates thermal bridging and condensation
 - Yields high tensile strength
- The Drill-Tec NTB-1HWW is FM and Dade County approved.

PLATES & ACCESSORIES

Use a 3" steel plate, 2" steel plate (with barbs), or batten bar. Use an NTB Eliminator drill attachment. Use a carbide tip drill bit for gypsum, lightweight concrete and some cementitious wood fiber applications.

PHYSICAL DATA

		SKU #	Length	Packaging	Weight
The data below is constant for each Drill-Tec NTB-1HWW. Head Size: 1" Diameter Head Style: Double Internal Hex Drive Major Thread Diameter: .750 Thread: 3.5 T.P.I. Buttress Material: Glass-Filled Nylon		45DA	2½"	500	15 lb
		45DB	3"	500	18 lb
		45DC	3½"	500	19 lb
		45DD	4"	500	21 lb
		45DE	4½"	500	23 lb
		45DF	5"	500	26 lb
		45DG	5½"	500	28 lb
		45DH	6"	500	30 lb
		45DI	6 ½"	500	31 lb
		45DJ	7"	500	32 lb
		45DK	7½"	500	34 lb
		45DL	8"	250	18 lb
		45DM	8½"	250	19 lb
		45DN	9"	250	20 lb
		45DO	9½"	250	21 lb
		45DP	10"	250	22 lb



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from North America's Largest
Roofing Manufacturer™

GYPSUM, TECTUM® & LIGHTWEIGHT DECKS

DRILL•TEC™ NTB®-1HWW WITH LOCKING WIRE BARBS

SPECIFICATIONS

The fastener will be a Drill-Tec™ NTB-1HWW Fastener with a 1" head, locking wire barbs, and a major thread diameter of .750. The Drill-Tec NTB-1HWW will be used with a Factory Mutual approved, Drill-Tec steel or plastic plate or pressure bar. The fastener must be Factory Mutual approved and made in the U.S.

APPLICATION

The Drill-Tec NTB-1HWW Fastener must penetrate the deck a minimum of 1-1/2" (2" recommended). The fastener must not penetrate the underside of the deck. The most effective method of engaging the wire barbs during installation is with the NTB Eliminator drill attachment.

The Drill-Tec NTB-1HWW can be installed into Tectum® decks without pre-drilling. A pilot hole is required for gypsum, lightweight concrete and some cementitious wood fiber decks (Permadeck, Insulrock, etc.). Use a 7/16", 1/2" or 9/16" carbide tip drill bit. Diameter of drill bit is determined by pull-out test results. Hole depth must be 1/2" deeper than embedment.

PHYSICAL DATA

Head Style: Double Internal Hex Drive Head Size: 1" Thread: 3.5 T.P.I.

Major Thread Diameter: .750 Material: Glass-Filled Nylon Packaging: 250, 500/carton

EXAMPLE

DRILL-TEC NTB-1HWW LENGTH SELECTION PROCEDURE

1. If applicable, determine thickness of existing roofing material.
2. Add thickness of new insulation.
3. Add 1 1/2" minimum fastener penetration.

NOTE: When pre-drilling, allow extra 1/2".

4. If odd size requirement, always size up in length, not down. See example.

Example

Existing Roofing:	<u>1 3/4"</u>
New Insulation:	<u>1/2"</u>
Min. Embedment:	<u>1 1/2"</u>
Total Fastening Range	<u>3-3/4"</u>

Existing Roofing:	_____
New Insulation:	_____
Min. Embedment:	<u>1-1/2"</u>
Total Fastening Range	_____

Use this format to calculate your correct fastener size.

The proper NTB-1HWW for this example is 4". (2" minimum embedment for all FM applications.)



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