

Drill-TecTM
NTB-1HWO
Data Sheet

Updated: 5/09



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

Drill-Tec™ NTB-1HWO

Data Sheet

Updated: 8/09



**Quality You Can Trust Since 1886...
From North America's Largest Roofing Manufacturer!™**

GYPSUM, TECTUM® & LIGHTWEIGHT DECKS

DRILL•TEC™

PRODUCT DESCRIPTION

The Drill-Tec™ NTB-1HWO is a glass-filled nylon auger fastener with a 1" head. 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.

The NTB-1HWO may be used with a 3" steel plate for insulation attachment. For single-ply membrane attachment use batten bar. The NTB-1HWO is available in 2-1/2" to 10" lengths. The NTB-1H is Factory Mutual and Dade County approved.

APPLICATION

The Drill-Tec NTB-1HWO 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 1-1/2" (2" recommended). The NTB fastener should never penetrate the underside of the deck.

The use of a 3" plate is recommended for securing insulation.

Note: Be careful not to overdrive the fastener, causing subsequent damage to the insulation facer.

PHYSICAL DATA	SKU #	Length	Packaging	Weight
The data below is constant for each Drill-Tec NTB-1HWO. 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	45CA	2½"	500	13 lb
	45CB	3"	500	15 lb
	45CC	3½"	500	17 lb
	45CD	4"	500	19 lb
	45CE	4½"	500	21 lb
	45CF	5"	500	24 lb
	45CG	5½"	500	26 lb
	45CH	6"	500	28 lb
	45CI	6½"	500	29 lb
	45CJ	7"	500	30 lb
	45CK	7½"	500	32 lb
	45CL	8"	250	16 lb
	45CM	8½"	250	17 lb
	45CN	9"	250	18 lb
	45CO	9½"	250	19 lb
	45CP	10"	250	20 lb

NTB®-1HWO



Fast Facts

The Drill-Tec NTB-1HWO with a 1" head 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

- 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-1HWO is FM and Dade County approved.

PLATES & ACCESSORIES

Use 3" steel plate or batten bar.

Use a carbide tip drill bit for gypsum, lightweight concrete, and some cementitious wood fiber applications.



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GYPSUM, TECTUM® & LIGHTWEIGHT DECKS

DRILL•TEC™ NTB®-1HWO

SPECIFICATION

The fastener will be a Drill-Tec™ NTB-1HWO Fastener with a 1" head and a major thread diameter of .750. The Drill-Tec NTB-1HWO will be used with a Factory Mutual approved Drill-Tec steel or batten bar. The fastener must be Factory Mutual approved and made in America.

APPLICATION

The Drill-Tec NTB-1HWO Fastener must penetrate the deck a minimum of 1 1/2" (2" recommended). The fastener must not penetrate the underside of the deck.

The Drill-Tec NTB-1HWO 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" drill bit. Diameter of drill bit is determined by pull-out test results. Hole depth must be 1/2" deeper than embedment. Diameter of hole is determined by pull-out results.

Note: Be careful not to overdrive the fastener, causing subsequent damage to the insulation facer. Fastener must be tight enough so that the plate doesn't turn.

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

DRILL-TEC NTB-1HWO 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>

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

Existing Roofing:	_____
New Insulation:	_____
Min. Embedment:	<u>1 1/2"</u>
Total Fastening Range	_____
Use this format to calculate your correct fastener size.	



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