



*Speed*  
**Performance**  
*Versatility*



**Blue Banger Hanger®**

*Cast-in-place, Internally-Threaded Rod Hanger*



## Eliminate Costly Overhead Installations



Multi-thread, cast-in-place insert maximises jobsite efficiency and reduces inventory commitment.

### Features:

## Speed



- Before the concrete pour, Blue Banger Hangers mount on forms or decking quickly and easily, speeding up installation.



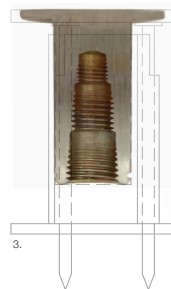
- The 75mm blue sleeve on the Metal-Deck insert makes it easy to locate the insert after the pour, even after fireproofing has been applied to the underside of the deck. It also protects the threads, so the rod installs easily every time.



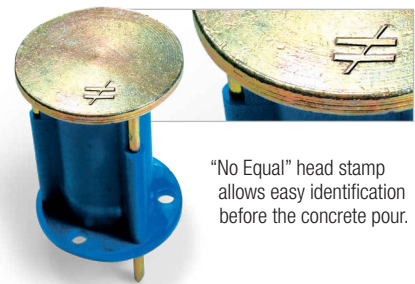
- On the Wood-Form insert, the blue ring acts as a locator after the pour and creates a countersunk recess to protect the threads.

## Performance

1. Large flanged head provides high tension loads for overhead attachments.
2. Full thread engagement prevents the rod from stripping out of the insert.
3. Positive connection to the form or deck keeps the insert vertical and in the correct position before and during the pour ensuring that the insert stays where you put it.

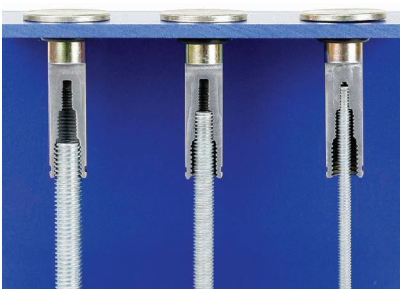


Full thread engagement provides maximum performance.



"No Equal" head stamp allows easy identification before the concrete pour.

## Versatility



- Patented multi-thread design allows each insert to accept multiple diameters of threaded rod. Three sizes of Blue Banger Hanger can handle most applications, reducing contractor and distributor inventories.
- Multi-thread design allows threaded rod size to be changed after the anchor is in the concrete.

Multiple rod diameters are no problem with the Blue Banger Hanger.





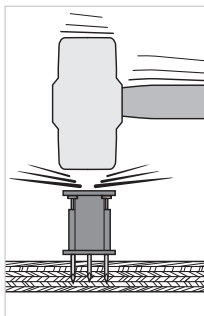
## Wood-Form Insert

### Features



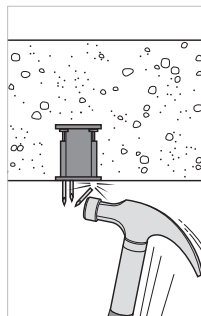
- Multi-thread design: Each insert accepts multiple rod diameters.
- Blue plastic ring acts as an insert locator when forms are removed.
- Plastic ring creates a countersunk recess to keep internal threads clean from concrete residue.
- Nails snap off with the swipe of a hammer after the forms are removed.

### Installation



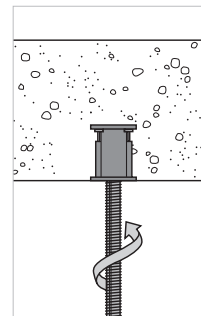
#### *Bang*

Strike the top of the hanger and drive the 3 mounting nails into the forming material until the bottom of the hanger is flush with the bottom of the plywood. The hanger should be sitting 90° from the forming material.



#### *Snap*

Once concrete is hardened, and forms are stripped, strike the mounting nails to break them off.



#### *Thread*

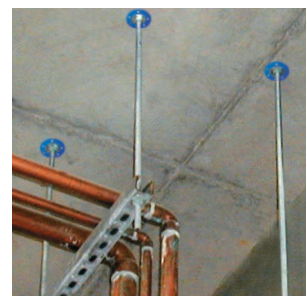
Insert the rod into the sleeve and thread it into the hanger.

### Product Data

Hanger Type	For Rod Diameter (mm)	Model Number	Carton Qty.
Wood-Form Insert	M6, M10, M12	BBWF0612	200
	M10, M12, M16	BBWF1016	150
	M16, M20	BBWF1620	150

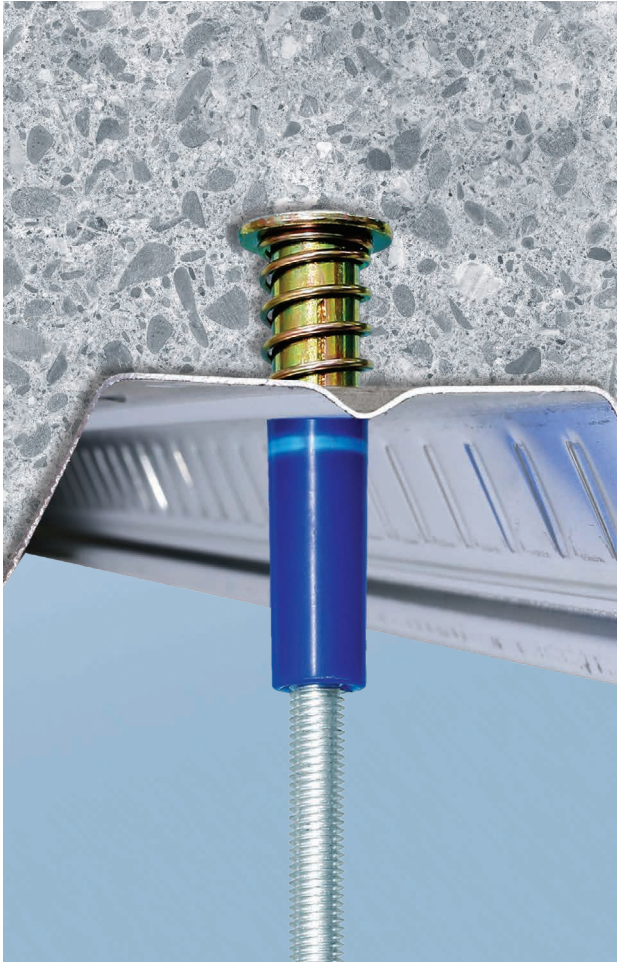
**Material:** Carbon steel

**Finish:** Yellow zinc dichromate coating



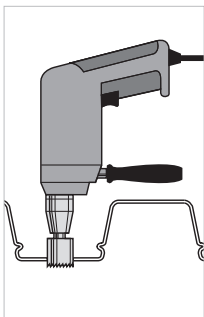
## Metal-Deck Insert

### Features



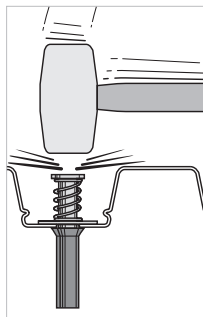
- Multi-thread design: Each insert accepts multiple rod diameters.
- 75mm Plastic sleeve keeps internal threads clean.
- Extended length of the sleeve allows easy location of the insert even with fireproofing on the underside of the deck. Also provides guidance to align threaded rod with the internal threads.
- Installed height of 50mm allows the insert to be used on top of, or between, deck flutes.
- Compression spring keeps the insert perpendicular to the deck, even if it is bumped or stepped on after installation.

### Installation



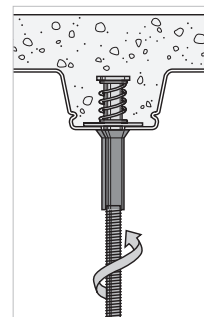
#### Drill

Drill a hole in the metal deck using the appropriate diameter bit as referenced in the table.



#### Bang

Insert the hanger in to the hole & strike the top so that the plastic sleeve is forced through the hole and expands against the bottom side of the deck. The anchor can also be installed by stepping on it.



#### Thread

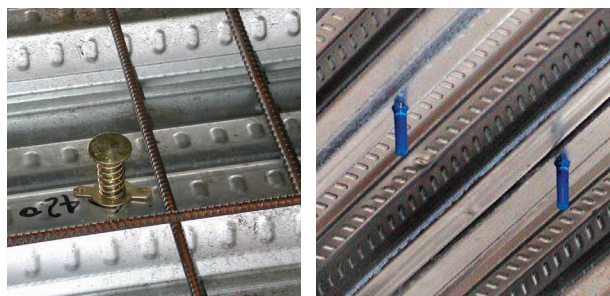
Insert the rod into the sleeve and thread it into the hanger.

### Product Data

Hanger Type	For Rod Diameter (mm)	Deck Hole Diameter (mm)	Model Number	Carton Qty.
Metal-Deck Insert	M6, M10, M12	21 - 22	BBMD0612	100
	M10, M12, M16	29 - 30	BBMD1016	50
	M16, M20	30 - 32	BBMD1620	50

**Material:** Carbon steel

**Finish:** Yellow zinc dichromate coating



## Technical Information Wood-Form Insert

### Tension Loads in Normal-Weight Concrete

Model No.	Threaded Rod Dia. (mm)	Embed. Depth (mm)	Min. Edge Dist. (mm)	Min. Spacing (mm)	Tension Capacity Based on Concrete Strength		Tension Capacity Based on Rod Strength
					20 Mpa		Grade 5.8
					Characteristic	Design	Design
BBWF0612	M6	51	178	203	34.2	22.3	6.5
	M10						18.9
	M12						27.4
BBWF1016	M10	51	178	203	36.5	23.7	18.9
	M12						27.4
	M16						51.0
BBWF1620	M16	51	178	203	34.2	22.3	51.0
	M20						79.6

See notes below

### Shear Loads in Normal-Weight Concrete

Model No.	Threaded Rod Dia. (mm)	Embed. Depth (mm)	Min. Edge Dist. (mm)	Min. Spacing (mm)	Shear Capacity Based on Concrete Strength		Shear Capacity Based on Rod Strength
					20 Mpa		Grade 5.8
					Characteristic	Design	Design
BBWF0612	M12	51	178	203	30.3	22.7	15.8
BBWF1016	M16	51	178	203	36.5	27.4	29.4
BBWF1620	M20	51	178	203	39.0	29.2	45.9

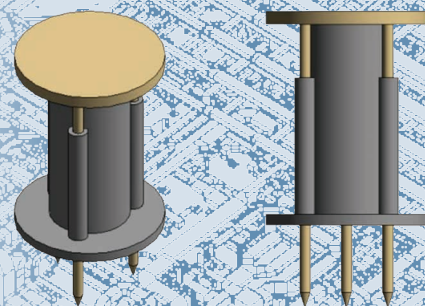
See notes below

1. Characteristic and design values in the tables are based on testing per ICC Evaluation Services, AC446. For tension design capacities, a 0.65 strength reduction factor is applied to the characteristic strength for concrete and the steel rod; For shear design capacities, a 0.75 strength reduction factor is applied to the characteristic strength for concrete and the steel rod.
2. The design value used shall be the lower of the concrete strength, steel rod strength, or governing local code requirements.
3. Design values may be used to resist seismic forces.
4. Shear loads shall be applied flush to the concrete surface.
5. Minimum concrete thickness shall be at least 2 x insert embedment depth.

### Autodesk® Revit® Drawings

#### What is Revit software?

Revit software is a computer-aided drafting (CAD) system which has become the industry standard for architectural drawings. Revit uses intelligent 3D objects called families, (.rfa) files, to represent real physical building components to create a 3D model of a project. These families contain graphic and non-graphic information about the components that can be used for design, scheduling and cost estimation. This process produces a Building Information Model (BIM) that can be shared for collaboration between architects, engineers, suppliers and contractors.





## Technical Information Metal Deck Insert

### Tension Loads in Normal-Weight or Sand-Lightweight Concrete over Metal Deck

Model No.	Drill Bit Dia (mm)	Threaded Rod Dia. (mm)	Embed. Depth (mm)	Min. Edge Dist. (mm)	Min. Spacing (mm)	Tension Capacity Based on Concrete Strength				Tension Capacity Based on Rod Strength
						(Install in High Flute) 20.7 Mpa		(Install in Low Flute) 20.7 Mpa		Grade 5.8
						Characteristic	Design	Characteristic	Design	Design
BBMD0612	21-22	M6	51	178	203	35.2	22.9	35.2	22.9	6.5
		M10								18.9
		M12								27.4
BBMD1016	29-30	M10	51	178	203	35.2	22.9	35.2	22.9	18.9
		M12								27.4
		M16								51.0
BBMD1620	30-32	M16	51	178	203	35.2	22.9	35.2	22.9	51.0
		M20								79.6

See notes below

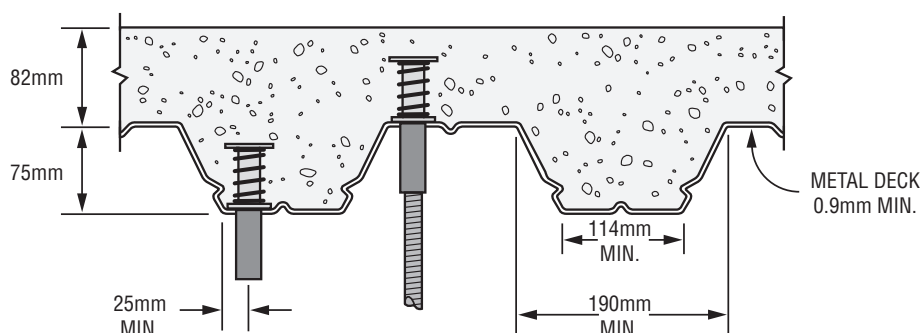
### Shear Loads in Normal-Weight or Sand-Lightweight Concrete over Metal Deck

Model No.	Drill Bit Dia (mm)	Threaded Rod Dia. (mm)	Embed. Depth (mm)	Min. Edge Dist. (mm)	Min. Spacing (mm)	Shear Capacity Based on Concrete Strength				Shear Capacity Based on Rod Strength
						(Install in High Flute) 20.7 Mpa		(Install in Low Flute) 20.7 Mpa		Grade 5.8
						Characteristic	Design	Characteristic	Design	Design
BBMD0612	21-22	M12	51	191	203	15.6	11.7	13.8	10.4	15.8
BBMD1016	29-30	M16	51	191	203	7.6	5.7	11.6	8.7	29.4
BBMD1620	30-32	M20	51	191	203	24.8	18.6	14.9	11.2	45.9

See notes below

1. Characteristic and design values in the tables are based on testing per ICC Evaluation Services, AC446.  
For tension design capacities, a 0.65 strength reduction factor is applied to the characteristic strength for concrete and the steel rod;  
For shear design capacities, a 0.75 strength reduction factor is applied to the characteristic strength for concrete and the steel rod.
2. The design value used shall be the lower of the concrete strength, steel rod strength, or governing local code requirements.
3. Design values may be used to resist seismic forces.
4. Anchors may be installed off-center in the flute provided that a minimum flute edge distance of 25mm is maintained (center of insert).
5. Shear loads shall be applied flush to the metal deck surface.
6. The metal deck thickness shall be 0.9mm thick, minimum.

### Typical Metal Deck Installation



## Save Time and Reduce Worker Fatigue!

Working on top of the forms or metal deck before concrete is poured is easier and faster than installing drop-in anchors from underneath after the concrete is in place. Consider the realities of working overhead:

- Drilling overhead is hard work, contributing to worker fatigue.
- Moving ladders or maneuvering scissor-lifts slows down work.
- Working overhead poses inherent safety risks.
- Installing anchors after the pour means you may have to deal with fixtures installed by other trades.



### Installation Time Comparison



VS.



Blue Banger Hanger  
for Wood Forms

Drop-In Anchors

Type of Anchor	M10 Drop-In	M12 Drop-In	<b>BBWF0612</b> (for M6, M10 & M12 rod)
Time Required Per Anchor	2m 8s	2m 19s	<b>10 Seconds</b>
Time Required Per 100 Anchors	3h 28m	3h 39m	<b>16m 40s</b>



VS.



Blue Banger Hanger  
for Metal Deck

Drop-In Anchors

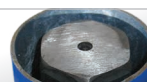
Type of Anchor	M10 Drop-In	M12 Drop-In	<b>BBMD0612</b> (for M6, M10 & M12 rod)
Time Required Per Anchor	2m 19s	2m 30s	<b>18 Seconds</b>
Time Required Per 100 Anchors	3h 39m	4h 10m	<b>30 Minutes</b>

### Installation Tool and ID Stickers



**BBWF01 Installation Tool**  
For Wood-Form Insert

- Hammers Wood-Form Inserts from an ergonomic standing position
- Shock absorbing soft handle grips
- Magnetic head holds Wood-Form Insert in place



**Coloured Identification Stickers**  
Easily ID different Trades or Services

- Save time by eliminating confusion between trades
- Provides fast identification from underneath post-concrete pour.
- Multiple colours available - Red, Orange & Green
- Adhesive label supplied in packs of 200.



**BBHIDRD**



**BBHIDOR**



**BBHIDGR**

## Cost-Effective, High-Quality Anchoring Solutions

Simpson Strong-Tie® provides a complete line of adhesive and mechanical anchors as well as powder-actuated fastening solutions for mechanical, electrical and plumbing (MEP) applications. Combining cost effectiveness with unmatched quality, Simpson Strong-Tie provides many code-listed products for both cracked and uncracked concrete applications. Recognising this quality commitment and our history of code-related testing, future seismic bracing manuals, such as those from ISAT and UniStrut®, will list Simpson Strong-Tie products as approved anchoring solutions for their systems.



### AT-HP®, ET-HP® & SET-XP® Chemical Anchors

#### High-Strength Anchoring for Concrete and Masonry

Simpson Strong-Tie® delivers a range of high-strength, cost-effective acrylic and epoxy anchoring adhesives. Our adhesive formulations for anchoring into concrete are code-listed in cracked and uncracked concrete. Available in several cartridge sizes, we have the solution to match any project no matter the conditions.



### Titen HD® Screw Anchors

#### Innovative Design Enables Screw Anchor to Cut More Effectively with Reduced Installation Torque

The self-undercutting, non-expanding features of the Titen HD® screw anchor help ease installation while ensuring load is efficiently transferred to the base material. With no special drill bit needed, the Titen HD anchor can be installed and removed when MEP fixtures need to be moved. The Titen HD anchor is tested per ETA Option 1 to ensure outstanding performance in both cracked and uncracked concrete.



### Wedge Anchors

#### Vast Variety on Offer of the Popular General-Purpose Wedge Anchor

Simpson Strong-Tie® wedge anchor is ideal for MEP applications, such as for hanging overhead pipes, struts, equipment anchorage and other fixtures. The anchor is also effective for lightweight concrete applications, including concrete-over-metal decking. Wide scope of sizes available, ranging from M6 x 85mm to M20 x 263mm in Zinc and Mechanically Galvanised.



### Drop-In Anchors

#### Multiple Sizes and Styles Available When Flush Mounting Required

Drop-in anchors are internally threaded, deformation-controlled expansion anchors with a pre-assembled expander plug, suitable for flush mounting in solid base materials and hollow concrete applications. These anchors enable flush installation and consistent embedment that contribute to uniform rod lengths and deployment into deep and bottomless holes.



*This flier is effective until December 31, 2016, and reflects information available as of July 1, 2014. This information is updated periodically and should not be relied upon after December 31, 2016; contact Simpson Strong-Tie for current information and limited warranty or see [www.strongtie.com](http://www.strongtie.com)*

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