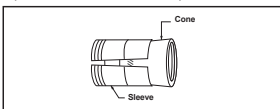


## Hollow Set - Drop in Anchor



### 12.0 PRODUCT DESCRIPTION

Macsim Hollow Set Drop-In is designed with a slotted, tapered expansion sleeve and a serrated expansion cone. Hollow masonry materials often have a maximum outer wall thickness of 35mm. During the drilling process, spalling on the back side of the wall as the bit penetrates into the hollow portion of the base material often decreases the wall thickness available for anchoring to 25mm or less. This creates a problem for most conventional style anchors which will not function properly in materials of this thickness. The design of the Hollow Set Drop-In overcomes this problem because the expansion sleeve length is sized to be compatible with outer wall thickness of most hollow base materials. The expansion sleeve has a large radial bearing area which reduces the amount of compression force applied to the base material during the expansion process.



### 12.1 MATERIAL SPECIFICATION

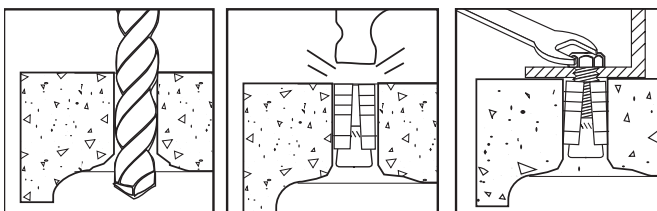
Anchor Body: Zamac 7 Alloy

Cone: AISI 12L14 or 304S/S

Plating (cone): ASTM B 633, SC1 Type III (Zn / Fe)

### 12.2 INSTALLATION METHOD

1. Drill a hole into the base material to the required depth. In hollow base materials drill through into the cell or void. The tolerances of the drill bit used should meet the requirements of ISO/DIN Standard 8035.
2. Blow the hole clean of dust and other material.
3. Do not expand the anchor prior to installation. Insert cone end and tap flush to surface.
4. Position fixture, insert bolt and tighten. The bolt should engage a minimum of 2/3 of the anchor threads. The anchor can also be expanded using a setting tool.



### 12.4 ANCHOR SIZE

The following tables list the sizes of Hollow Set Drop-In anchors. To select the proper length bolt, determine the thickness of the fixture including any spacers or shims. Add this to the depth required to engage at least 2/3 of the threads in the cone.

CODE	Anchor Size	Hole Size	Overall Length (mm)	Sleeve Length	STD Box
10HS10	10mm	16	33	24	100

### 12.5 PERFORMANCE DATA

The following ultimate load capacities are based on testing conducted according to ASTM Standard E 488.

Anchor Size	Embed. Depth (mm)	15MPa Concrete		30MPa Concrete		40MPa Concrete	
		Tension (kN)	Shear (kN)	Tension (kN)	Shear (kN)	Tension (kN)	Shear (kN)
3/8" (10mm)	38	13.5	14.1	20.5	18.9	22.8	26.7

#### Ultimate load capacities for C-90 Block

Anchor Size	Embed. Depth (mm)	C-90 Hollow Block	
		Tension (kN)	Shear (kN)
3/8" (10mm)	38	15.5	11.1

#### Ultimate load capacities for Solid Brick

Anchor Size	Embed. Depth (mm)	Solid Red Brick	
		Tension (kN)	Shear (kN)
3/8" (10mm)	38	8.3	13.4

\*Anchors were installed with sleeve flush to face shell surface