

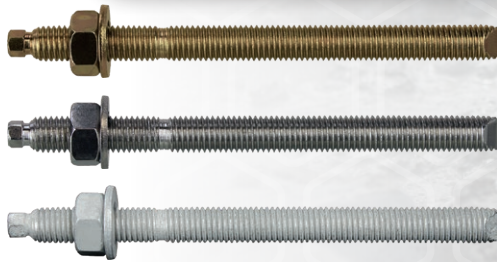


## Grout Filled Masonry Blockwork BIS-P Gen2 & BIS-V



**NOTE\*\***

While the application for Grout Filled Blockwork only requires the performance of PolyPRO & Vinylester, Information contained in this data sheet is also applicable when threaded rod is used with ICCONS extreme performance adhesives BIS PE GEN3 and BIS HY GEN2.



### Limit State Design Loads in Grout Filled Masonry Blockwork

Rod Size	Hole Size (mm)	Embedment Depth (mm)	Grout Filled Blockwork	
			$\phi_{N_A}$ Tension (kN)	$\phi_{V_A}$ Shear (kN)
M8	10	80	6.2	7.2
M10	12	90	11.8	9.0
M12	14	110	16.5	14.1
M16	18	125	17.6	16.0

### Recommended Loads in Grout Filled Masonry Blockwork

Rod Size	Hole Size (Mm)	Sleeve Size	Grout Filled Blockwork	
			$N_{rec}$ Tension (kN)	$V_{rec}$ Shear (kN)
M8	10	80	3.4	4.0
M10	12	90	6.6	5.0
M12	14	110	9.2	7.8
M16	18	125	9.8	8.9

**Notes:** Block: 400 x 200 x 200mm  
Block compressive strength  $\geq$  10MPa, Grout Compressive strength  $\geq$  20MPa



## Edge Distance and Spacing Parameters for Grout Filled Masonry Blockwork

Rod Size	M8	M10	M12	M16
Edge Distance (min.)	120mm	135mm	150mm	150mm
Spacing (min.)	240mm	270mm	300mm	300mm

## Design Guidelines - Grout Filled Masonry Blockwork

The performance of anchoring systems into masonry may vary greatly depending on the masonry base material, job site testing is recommended to verify actual performance. The above data is intended for guidance only and based on installation in accordance with ICCONS® installation instructions, refer to the adhesive product tube for details or go to [www.iccons.com.au](http://www.iccons.com.au).

- When fixing into grout filled masonry blockwork, position anchors a minimum edge distance from wall end or wall opening as per table guidelines above.
- Minimum recommended spacing between anchors should be as per table guidelines above.
- Embedment should be limited to within 30 to 40 mm of the remote face of the block/ brick.
- Anchors should be positioned 2 block courses down from the top of an unrestrained wall.
- Avoid fixing into mortar joints unless site testing has been conducted to verify performance.

## Combined Tension & Shear Loading

For Combined tension and shear load applications the following equations shall be satisfied

$$N_{\text{applied}} / N_{\text{rec}} \leq 1 \quad V_{\text{applied}} / V_{\text{rec}} \leq 1 \quad (N_{\text{applied}} / N_{\text{rec}}) + (V_{\text{applied}} / V_{\text{rec}}) \leq 1.2$$

Where:

$N_{\text{applied}}$  = Applied Tension Load

$V_{\text{applied}}$  = Applied Shear Load

$N_{\text{rec}}$  = Recommended Tension Load

$V_{\text{rec}}$  = Recommended Shear Load

## Specification Example

Adhesive : BIS-P Gen2 Injection System

Adhesive : BIS-V Injection System

Rod Size : M12 (Drill size 16mm)

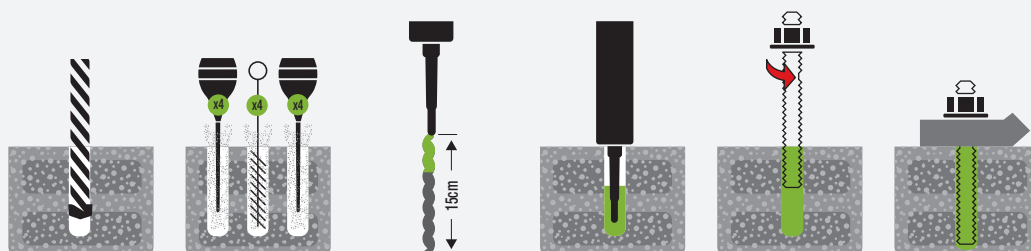
Rod Size : M12 (Drill size 16mm)

Installation to be done in accordance with ICCONS Grout Filled Masonry Blockwork Installation Instructions

Note: For full range and sizes available refer to ICCONS® IPG Product Guide or visit [www.iccons.com.au](http://www.iccons.com.au)

## Installation instructions

### Grout Filled Masonry Blockwork



For new cartridges dispense a bead of adhesive until even and consistent colour is present to ensure correct mix of adhesive.