PSA

Metric Threaded Bars

Technical Data Sheet

METRIC STARTER BARS

PSA stock a range of Metric Starter Bars used for panel to slab connections in precast and tilt panel construction. PSA can arrange for custom starter bar lengths to suit your special applications, along with fittings to suit.

Metric Starter Bars fit into Metric Threaded Insert like the PSA X-Foot Ferrules and PSA Round Ferrules.

Metric Starter Bars - Product Overview			
Product Code	**Description**	**Bar size**	**Length (mm)**
TR12600	Metric Starter Bar N12 – 600mm long	N12	600
TR16600	Metric Starter Bar N16 – 600mm long	N16	600
TR161000	Metric Starter Bar N16 – 1000mm long	N16	1000
TR20600	Metric Starter Bar N20 – 600mm long	N20	600
TR20800	Metric Starter Bar N20 – 800mm long	N20	800
TR201000	Metric Starter Bar N20 – 1000mm long	N20	1000
TR201200	Metric Starter Bar N20 – 1200mm long	N20	1200
TR241000	Metric Starter Bar N24 – 1000mm long	N24	1000

Note: Standard Metric Starter Bars come with a cut end on the opposite of the thread. For faster installation, bars are available with a hex head on the end opposite to the thread – use item code ending "SE". Contact the PSA Sales Team to ask for availability of bars with hex head.

DESIGN

As the design cross section of the thread that is cut on the Metric Starter Bars is smaller compared to the cross section of the bar itself, the capacity of the Metric Starter bar is reduced compared to the capacity of the undisturbed bar.

The following table shows the design

Metric Starter Bars – Design capacities				
Bar Size	**Thread Size**	**Tensile stress area (mm^2)**	**Characteristic Yield capacity (kN)**	**Characteristic Tensile capacity (kN)**
N12	M12 x 1.75	84.3	31.6	38.7
N16	M16 x 2.0	156.6	58.8	71.9
N20	M20 x 2.5	244.8	91.8	112.4
N24	M24 x 3.0	352.5	132.2	161.8

Note: As recommended by Infrabuild in "Product Guide - National Reinforcing Products and Services", 4th Edition, the table above is based on a yield strength of 0.75 x 500 = 375MPa and tensile strength of 0.85 x 540 = 459MPa to allow for a reduced yield strength and tensile strength of the core material of the bar.

For applications requiring a full ductile connection of the reinforcement bar PSA offers PSA Forge Bar and PSA Threadbar. Both reinforcement continuity systems come with fitting headed anchors that can create ductile connections. Contact PSA to learn more about these systems

psa.com.au

For technical questions please contact technical@psa.com.au.

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