

Plates Product Data



Solutions from Materials Technology





Plates

Minova manufactures a wide range of plates and combination plates for use with rockbolts and cable bolts. Minova plates are designed in-house to provide optimal surface support in a range of strata conditions. Options of each plate type are available in numerous dimensions to suit any bolt type and diameter in the Minova range. All plates are available with a hanger loop in black steel or hot dip galvanised. Plates can also be manufactured in stainless steel if required.

Plate Range

Plate Type	Description
Dome Plate	High load bearing capacity, available in sizes 125 mm, 150 mm and 200 mm square, typically used with Solid Bolts, Strata Bolts and Cable Bolts.
Strata Plate	Light gauge plate for larger span use such as supporting mesh or low strength shotcrete, typically only used with Strata Bolts.
Combi Plate	Combination plate consisting of a Dome plate or a Crown plate fixed to a Strata Plate. Cuts down on the number of items and handling required on site.
Crown Plate	Developed for load bearing capacity equal to solid bolts. Specifically designed for use with M24 rock bolts and Secura Bolts.
Flat Plate	Numerous sizes and thickness available for use with cable bolting. Single or multiple hole options also available.





Technical Data

Dome Plate Dimensions (mm)	Thickness (mm)	Dome Height (mm)	Hole Size (mm)	Test Hole Diameter (mm)	Typical Yield Strength (MPa)	Typical Tensile Strength (MPa)	Plate Load (kN)	Typical Bolt Used
125 x 125	4.0	18.0	36	50	210-310	330-370	79	Strata Bolt 34
125 x 125	4.0	19.0	49	50	210-310	330-370	140	Strata Bolt 47, Jumbolt, Strata Tunnel Bolt
150 x 150	4.0	25.0	43.0	50	210-310	330-370	108	Strata Bolt 40
150 x 150	4.0	24.0	49.0	50	210-310	330-370	147	Strata Bolt 47, Jumbolt, Strata Tunnel Bolt, Secura Bolt
150 x 150	7.0	22.5	36.0	80	210-310	300-400	197	Secura Bolt, Cable Bolt
200 x 200	4.0	24.0	49.0	50	210-310	330-370	147	Strata Bolt 47, Jumbolt, Strata Tunnel Bolt
150 x 150	6.0	21.5	36	100	210-310	300-400	100	M24 Rockbolts, Cable Bolts
150 x 150	8.0	23.5	36	100	210-310	300-400	169	M24 Rockbolts, Cable Bolts
150 x 150	10.0	25.5	36	100	210-310	300-400	265	M24 Rockbolts, Cable Bolts
200 X 200	12.0	31.0	42.0	100				Cable Bolts
250 X 250	12.0	31.0	42.0	100				Cable Bolts
300 X 300	12.0	31.0	42.0	100				Cable Bolts
200 X 200	16.0	35.0	42.0	100				Cable Bolts
250 X 250	16.0	35.0	42.0	100				Cable Bolts
300 X 300	16.0	35.0	42.0	100				Cable Bolts

Strata Plate Dimensions (mm)	Thickness (mm)	Dome Height (mm)	Hole Size (mm)	Test Hole Diameter	Typical Yield Strength (MPa)	Typical Tensile Strength (MPa)	Plate Load (kN)	Typical Bolt Used
300 x 280	1.9	N/A	50	N/A	230-330	360-330	N/A	Strata Bolt 47
400 x 280	1.9	N/A	50	N/A	230-330	360-330	N/A	Strata Bolt 47
300 x 240	1.9	N/A	50	N/A	230-330	360-330	N/A	Strata Bolt 47
300 x 240	1.9	N/A	50	N/A	230-330	360-330	N/A	Strata Bolt 47

Plates

Combi Plate Dimensions (mm)	Thickness (mm)	Dome Height (mm)	Hole Size (mm)	Test Hole Diameter	Typical Yield Strength (MPa)	Typical Tensile Strength (MPa)	Plate Load (kN)	Typical Bolt Used
300 x 240 Strata Plate	1.9	18.0	38	50	230–330	360–430	200	Secura Bolt
125 x 125 Dome Plate	4.0				210–310	330–370		
300 x 280 Strata Plate	1.9	25.5	50	50	230–330	360–430	150	Strata Bolt 47, Jumbolt, Strata Tunnel Bolt
150 x 150 Dome Plate	4.0				210–310	330–370		
400 x 280 Strata Plate	1.9	25.5	50	50	230–330	360–430	150	Strata Bolt 47, Jumbolt, Strata Tunnel Bolt
150 x 150 Dome Plate	4.0				210–310	330–370		

Crown Plate Dimensions (mm)	Thickness (mm)	Dome Height (mm)	Hole Size (mm)	Test Hole Diameter (mm)	Typical Yield Strength (MPa)	Typical Tensile Strength (MPa)	Plate Load (kN)	Typical Bolt Used
150 x 150	5.0	30	42	100	410–510	470–550	180	M24 Bolt, Secura Bolt
150 x 150	5.0	30	42	80	410–510	470–550	240	Secura Bolt

Flat Plate Dimensions (mm)	Thickness (mm)	Dome Height (mm)	Hole Size (mm)	Test Hole Diameter (mm)	Typical Yield Strength (MPa)	Typical Tensile Strength (MPa)	Plate Load (kN)	Typical Bolt Used
200 x 200	10.0	N/A	18.0	N/A	210–310	300–400	N/A	Cable Bolt
250 x 250	10.0	N/A	18.0	N/A	210–310	300–400	N/A	Cable Bolt
300 x 300	10.0	N/A	18.0	N/A	210–310	300–400	N/A	Cable Bolt
200 x 200	12.0	N/A	20.0	N/A	210–310	300–400	N/A	Cable Bolt
250 x 250	12.0	N/A	20.0	N/A	210–310	300–400	N/A	Cable Bolt
300 x 300	12.0	N/A	20.0	N/A	210–310	300–400	N/A	Cable Bolt

Plate Load (kN) is defined as the point where the plate offers minimal additional load carrying capacity accompanied by large plate deflections
N/A = Not Applicable for this particular plate type

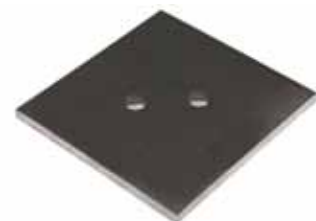
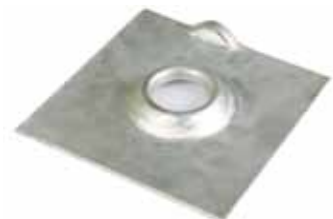
Product Standards

Plate Type	Material	Galvanising
Dome Plates	AS1594	AS4680
Strata Plates	AS1594	AS4680
Combi Plates	AS1594	AS4680
Crown Plates	AS1594	AS4680
Flat Plates	AS1594	AS4680

The following table includes the most typical plates. Other sizes, dimensions and combinations are available on request.

Codes, Descriptions and Weights

Item Code	Description	Unit Weight	Pack Size
DP302111	Dome Plate 34 125x125x4 Galvanised	0.5 kg	1,000
DP302108	Dome Plate 47 125x125x4 Galvanised	0.5 kg	1,000
DP302103	Dome Plate 40 150x150x4 Black	0.7 kg	1,000
DP302113	Dome Plate 40 150x150x4 Galvanised	0.7 kg	1,000
DP302104	Dome Plate 47 150x150x4 Black	0.7 kg	1,000
DP302114	Dome Plate 47 150x150x4 Galvanised	0.7 kg	1,000
DP302121	Dome Plate 36 150x150x7 Black	1.2 kg	1,000
DP302122	Dome Plate 36 150x150x7 Galvanised	1.3 kg	1,000
DP302150	Dome Plate 22 150x150x7 Black	1.2 kg	1,000
DP302100	Dome Plate 47 200x200x4 Black	1.3 kg	500
DP302110	Dome Plate 47 200x200x4 Galvanised	1.3 kg	500
DP302151	Dome Plate 36 200x200x8 Galvanised	2.6 kg	500
SP304201	Strata Plate 280x300x1.9 Black	1.3 kg	1,000
SP304221	Strata Plate 280x300x1.9 Galvanised	1.3 kg	1,000
SP304225	Strata Plate 280x400x1.9 Galvanised	1.8 kg	500
CP304301	Combi Plate 280x300 150 47 Black	2.0 kg	300
CP304311	Combi Plate 280x300 150 47 Galvanised	2.1 kg	300
CP304316	Combi Plate 240x300 125 36 Gal	1.7 kg	300
CP304413	Combi Plate 280x300 125 34 Gal	2.0 kg	300
CDP303005	Crown Plate 42 150 x 150 x 5 mm Black (no hanger loop)	0.9 kg	1,000
CDP303006	Crown Plate 42 150 x 150 x 5 mm Black (with hanger loop)	0.9 kg	1,000
CDP303007	Crown Plate 42 150 x 150 x 5 mm Gal (no hanger loop)	0.9 kg	1,000
CDP303008	Crown Plate 42 150 x 150 x 5 mm Gal (with hanger loop)	0.9 kg	1,000
FP302526	Flat Plate 200x200x12 20 2 Hole Black	4.6 kg	200
FP302551	Flat Plate 200x200x8 26 2 Hole Black	3.8 kg	200
FP302552	Flat Plate 300x300x10 18 2 Hole Black	7.2 kg	200
FP302585	Flat Plate 300x300x10 18 2 Hole Galvanised	7.4 kg	200





Product Service Support

Minova provides a full service support package to customers, including underground pull testing, operator awareness training, underground audits and stock control assistance. Each service package is developed to suit the individual customers requirements.

All aspects of Minova's product service support service is provided by experienced trained and qualified personnel.

Additional Information

For additional information relating to any aspect of this product specification data, including product performance, quality, testing, specification, range, availability etc. please contact your nearest Minova office, or email: technicalsupport@minovaint.com

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