

## Rambolt Shield Anchor



**Rambolt shield anchors offer four way expansion, to produce exceptional grip**

Allows for oversized holes caused by powerful drills in weaker materials.

### Product Advantages

- Can be used in all types of base materials
- Simple expansion by tightening bolt
- Versatile - supplied with or without bolt stud version hook and eyebolt version
- Fixes wide variety of material thicknesses
- High performance - full area contact in hole (substrate)
- Stainless Steel A4 316 version - full corrosion resistance (shield only)

### Substrates

- Concrete
- Brick
- Block

### Specification

Rambolt Shield torque controlled expansion anchor. Sets by tightening the bolt or nut, which pulls a tapered expansion cone nut into an expanding sleeve.

#### Zinc Plated Version

Bolt 8.8 grade, nut grade 8.8, zinc plated to 5µm.

#### Stainless steel version

Grade A4-316 (Shield only).

### Typical Applications

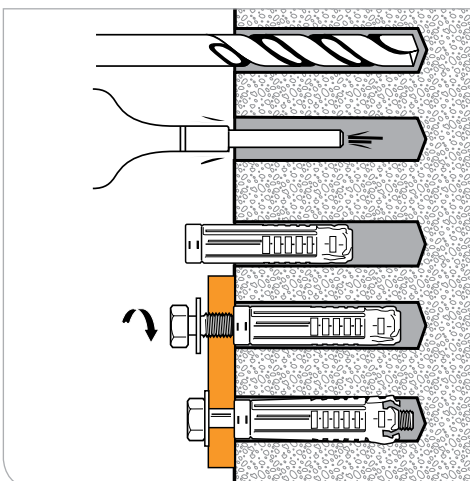
#### Loose Bolt Version

- Racking and storage
- Stadium seating
- Cable tray trunking
- Pipework switch gear
- Ventilation ducts
- Mechanical and electrical services

#### Projecting Bolt Version

- Lift guide rails
- Brackets
- Wall plates
- Scaffolding: hosts, eyes, guy ropes
- Chains
- Lighting supports

### Installation



1. Drill the correct diameter hole to the required depth for the Rambolt selected.
2. Remove debris from hole by blowing out with compressed air or hand held blow out pump.
3. Insert the anchor fully into the hole.
4. Position the part to be fixed, make the connection using the correct diameter bolt.
5. Tighten with the wrench to obtain the required torque.

## Rambolt Shield Anchor

### Product Range - Rambolt Shield Only - Zinc Plated Minimum 5µm



Eurocode	Code	Thread Diameter	Max Fixture Thickness	Overall Anchor Length	Shield/Hole Diameter	Min Hole Depth	Effective Embedment	Box Qty
921050	SA06	M6	-	-	10mm	45mm	40mm	50
921052	SA08	M8	-	-	14mm	55mm	50mm	50
921054	SA10	M10	-	-	16mm	65mm	60mm	50
921056	SA12	M12	-	-	20mm	90mm	80mm	25
921058	SA16	M16	-	-	25mm	110mm	100mm	10

### Product Range - Rambolt Shield Only - Stainless Steel Grade A4-316



Eurocode	Code	Thread Diameter	Max Fixture Thickness	Overall Anchor Length	Shield/Hole Diameter	Min Hole Depth	Effective Embedment	Box Qty
921051	SA06SS	M6	-	-	10mm	45mm	40mm	25
921053	SA08SS	M8	-	-	14mm	55mm	50mm	50
921055	SA10SS	M10	-	-	16mm	65mm	60mm	25
921057	SA12SS	M12	-	-	20mm	90mm	80mm	10

### Product Range - Rambolt Projecting Bolt - Zinc Plated Minimum 5µm



Eurocode	Code	Thread Diameter	Max Fixture Thickness	Overall Anchor Length	Shield/Hole Diameter	Min Hole Depth	Effective Embedment	Box Qty
921034	PB0610	M6	10mm	60mm	10mm	45mm	40mm	50
921035	PB0625	M6	25mm	75mm	10mm	45mm	40mm	50
921036	PB0650	M6	50mm	110mm	10mm	45mm	40mm	50
921037	PB0815	M8	15mm	75mm	14mm	45mm	50mm	50
921038	PB0840	M8	40mm	100mm	14mm	55mm	50mm	50
921039	PB0880	M8	80mm	140mm	14mm	55mm	50mm	25
921040	PB1010	M10	10mm	60mm	16mm	65mm	60mm	25
921041	PB1030	M10	30mm	100mm	16mm	65mm	60mm	25
921042	PB1050	M10	50mm	120mm	16mm	65mm	60mm	25

## Rambolt Shield Anchor

### Product Range - Rambolt Projecting Bolt - Zinc Plated Minimum 5µm (continued)

Eurocode	Code	Thread	Max Fixture	Overall	Shield/Hole	Min Hole	Effective	Box Qty
		Diameter	Thickness	Anchor Length	Diameter	Depth	Embedment	
921043	PB1070	M10	70mm	140mm	16mm	65mm	60mm	25
921044	PB1090	M10	90mm	160mm	16mm	65mm	60mm	25
921045	PB1215	M12	15mm	105mm	20mm	90mm	80mm	10
921046	PB1225	M12	25mm	115mm	20mm	90mm	80mm	10
921047	PB1250	M12	50mm	140mm	20mm	90mm	80mm	10
921048	PB1270	M12	70mm	160mm	20mm	90mm	80mm	10
921049	PB1625	M16	25mm	135mm	25mm	110mm	100mm	10

### Product Range - Rambolt Loose Bolt - Zinc Plated Minimum 5µm



Eurocode	Code	Thread	Max Fixture	Overall	Shield/Hole	Min Hole	Effective	Box Qty
		Diameter	Thickness	Anchor Length	Diameter	Depth	Embedment	
921017	LB0610	M6	10mm	60mm	10mm	45mm	40mm	50
921018	LB0625	M6	25mm	65mm	10mm	45mm	40mm	50
921019	LB0640	M6	40mm	80mm	10mm	45mm	40mm	50
921020	LB0810	M8	10mm	60mm	14mm	55mm	50mm	50
921021	LB0825	M8	25mm	75mm	14mm	55mm	50mm	50
921022	LB0840	M8	40mm	90mm	14mm	55mm	50mm	50
921023	LB1010	M10	10mm	70mm	16mm	65mm	60mm	25
921024	LB1025	M10	25mm	85mm	16mm	65mm	60mm	25
921025	LB1050	M10	50mm	110mm	16mm	65mm	60mm	25
921026	LB1075	M10	75mm	135mm	16mm	65mm	60mm	25
921027	LB1210	M12	10mm	90mm	20mm	90mm	80mm	25
921029	LB1240	M12	40mm	120mm	20mm	90mm	80mm	25
921030	LB1260	M12	60mm	140mm	20mm	90mm	80mm	25
921031	LB1615	M16	15mm	115mm	25mm	110mm	100mm	10
921032	LB1630	M16	30mm	130mm	25mm	110mm	100mm	10
921033	LB1660	M16	60mm	160mm	25mm	110mm	100mm	10

### Rambolt Shield, Loose Bolt and Projecting Bolt Indicative Tensile Loads in Concrete

Thread Ø (mm)	Hole Ø (mm)	Embed Depth (mm)	Torque (Nm)	Centre Spacing (mm)	Edge Dist. (mm)	C25 / 30 Tensile Load (kN)	C25 / 30 Shear Load (kN)
M6	10	40	6	140	76	2.8	4.6
M8	14	50	14	170	96	5.0	8.3
M10	16	60	27	200	116	6.7	13.2
M12	20	80	46	250	154	8.9	19.2
M16	25	100	110	380	188	13.4	22.8

## Rambolt Shield Anchor

### Product Range - Rambolt Forged Eyebolt - Zinc Plated Minimum 5µm



Eurocode	Code	Thread Diameter	Internal Eye Diameter	Shield Hole Diameter	Min Hole Depth	Effective Embedment	Box Qty
920989	E06F	M6	9mm	10mm	45mm	40mm	25
920991	E08F	M8	10mm	14mm	55mm	50mm	25
920993	E10F	M10	14mm	16mm	65mm	60mm	10
920995	E12F	M12	16mm	20mm	90mm	80mm	10

### Rambolt Eye Bolt Indicative Tensile Loads in Concrete

Thread Ø (mm)	Hole Ø (mm)	Embed Depth (mm)	Torque (Nm)	Centre Spacing (mm)	Edge Dist. (mm)	C25 Tensile Load (kN)	C25 Shear Load (kN)
M6	10	40	6	140	76	2.8	4.6
M8	14	50	14	170	96	5.0	8.3
M10	16	60	27	200	116	6.7	13.2
M12	20	80	46	250	154	8.9	19.2

### Product Range - Rambolt Forged Hookbolt - Zinc Plated Minimum 5µm



Eurocode	Code	Thread Diameter	Internal Eye Diameter	Shield Hole Diameter	Min Hole Depth	Effective Embedment	Box Qty
920996	H06F	M6	8mm	10mm	45mm	40mm	25
920997	H08F	M8	10mm	14mm	55mm	50mm	25
920998	H10F	M10	12.5mm	16mm	65mm	60mm	10
920999	H12F	M12	16mm	20mm	90mm	80mm	10

### Rambolt Forged Hook Bolt Indicative Tensile Loads in Concrete

Thread Diameter	Hole Diameter	Embed Depth	Torque	Centre Spacing	Edge Dist.	C20 / 25 Tensile Loads
M6	10mm	40mm	6Nm	140mm	76mm	2.7kN
M8	14mm	50mm	14Nm	170mm	96mm	4.8kN
M10	16mm	60mm	27Nm	200mm	116mm	6.7kN
M12	20mm	80mm	46Nm	250mm	154mm	8.9kN