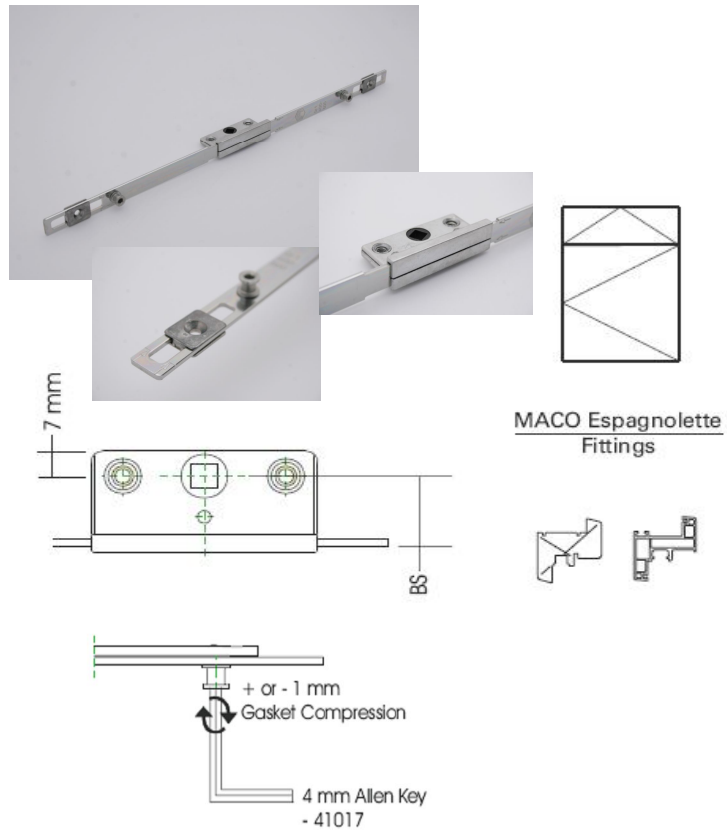
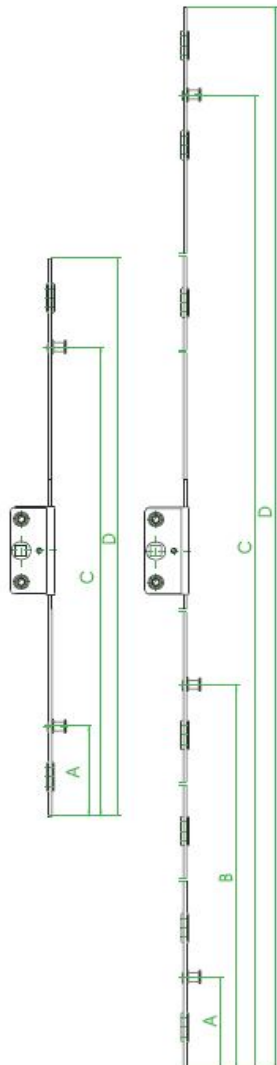




**MACO
ESPAGS**
ESPAGNOLETTES
OFFSET ESPAGS

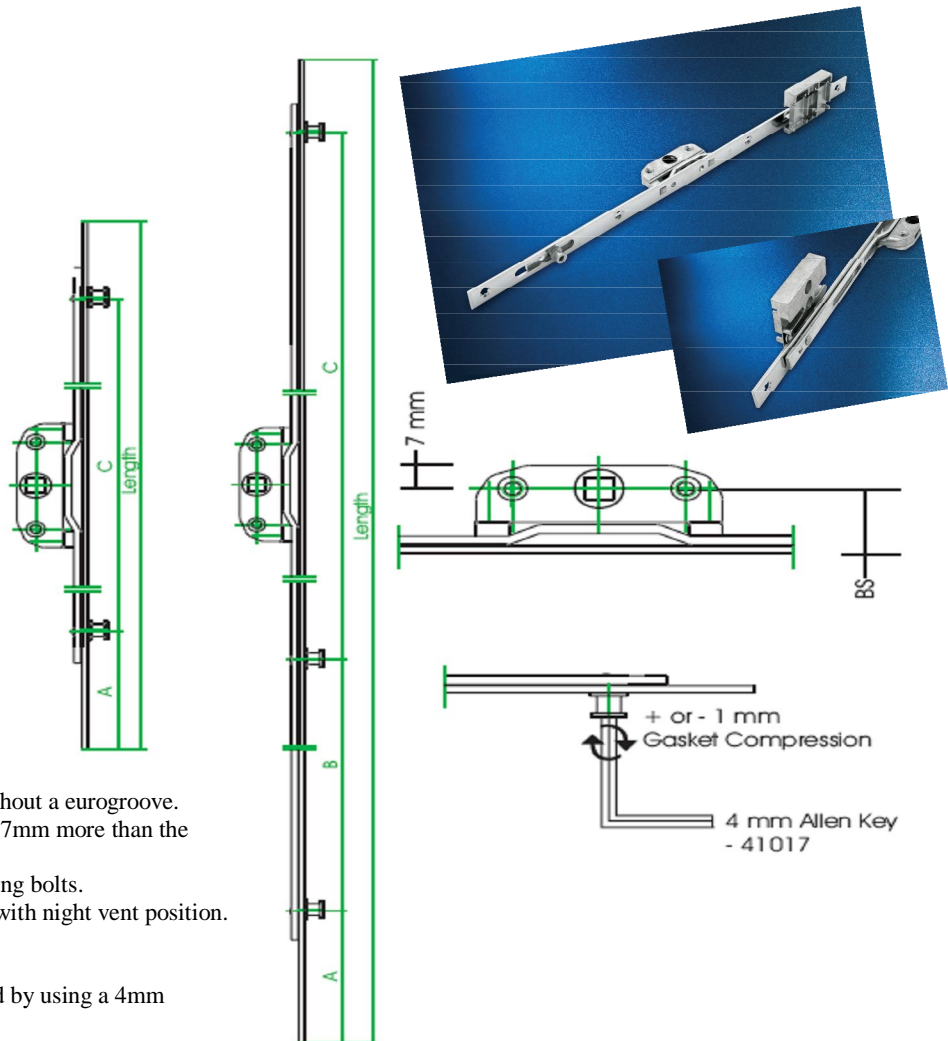


Multipoint locking espagnolette for side hung or top hung application with adjustable mushroom cams and is designed for profiles with or without a eurogroove. The Maco offset Espagnolette is available in various non-croppable lengths with two backsets and two cam heights. The Maco Offset Espagnolette is compatible with all standard espagnolette handles with 43mm fixing centres with a 7mm square spindle.




Length	BS	 7.7	 9.0	A - MM	B - MM	C - MM	D - MM
310	20mm	57151	57157	61	N/A	230	291
400	20mm	57152	57158	61	N/A	320	381
600	20mm	57153	57159	61	N/A	520	581
800	20mm	57154	57160	61	N/A	720	781
1000	20mm	57155	57161	61	346	920	981
1200	20mm	57156	57162	61	446	1120	1181
310	25mm	57163	57169	61	N/A	230	291
400	25mm	57164	57170	61	N/A	320	381
600	25mm	57165	57171	61	N/A	520	581
800	25mm	57166	57172	61	N/A	720	781
1000	25mm	57167	57173	61	346	920	981
1200	25mm	57168	57174	61	446	1120	1181

MACO ESPAGS ESPAGNOLETTES INLINE ESPAGS

Maco mushroom bolt espagnolettes for outward opening windows incorporate all the benefits of safety and security expected of modern window technology in today's environment.



- : Designed for profiles with or without a eurogroove.
- : The total lock case depth is only 7mm more than the backset.
- : Fully adjustable mushroom locking bolts.
- : Profile designated striker plates with night vent position.
- : Designed for slimline profiles.
- : Mushroom bolts throw 19mm.
- : The mushroom bolts are adjusted by using a 4mm Allen key.
- : When locating the striker plates, line up the centre position to the mark on the striker plate.

Length	BS	 7.7	 9.0	 10.5	A - MM	B - MM	C - MM
100	20mm	58486	58488	204251	N/A	N/A	N/A
260	20mm	58493	58494	58495	58	N/A	164
400	20mm	58501	58502	58500	71	N/A	278
600	20mm	58508	58509	58507	71	N/A	498
800	20mm	58515	58516	58514	71	N/A	678
1000	20mm	58522	58523	58521	71	294	584
1200	20mm	58528	58529	-	71	394	684
100	22mm	58490	58492	204253	N/A	N/A	N/A
260	22mm	58496	58497	58498	58	N/A	164
400	22mm	58504	58505	58503	71	N/A	278
600	22mm	58511	58512	58510	71	N/A	498
800	22mm	58518	58519	58517	71	N/A	678
1000	22mm	58525	58526	58524	71	294	584
1200	22mm	58530	58531	204258	71	394	684

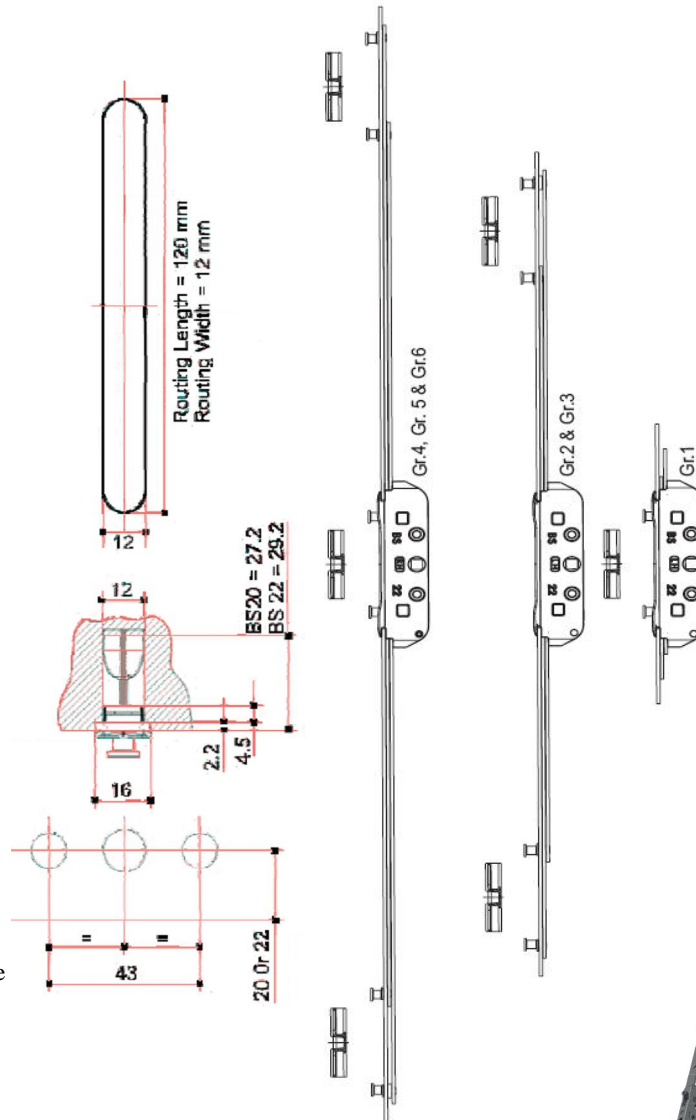
MACO ESPAGS

ESPAGNOLETTES
RAIL ESPAGS

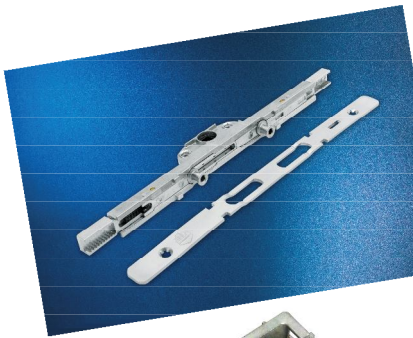
R.A.I.L -for when BS7950 security Windows are required without the need to fit a shootbolt espagnolette. The reverse action operation pulls the cams together, clamping them into both sides of the striker plate for strength and security.

The design of the R.A.I.L espagnolette makes it ideal for use on commercial applications, new build installations and public sector housing, R.A.I.L uses the existing range of MACO striker plates and is suitable for all types of eurogrooved profiles making it ideal for use not only on PVCU profile systems but also Timber and Aluminium.

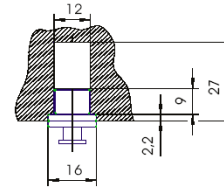
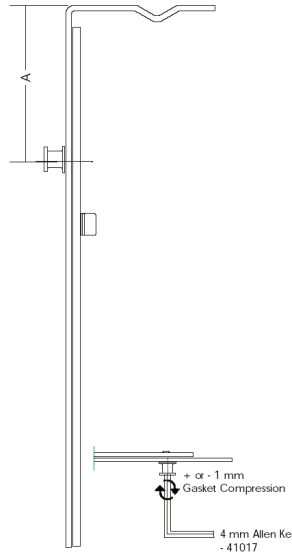
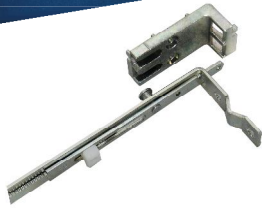
- Reverse action locking system which clamps both sides of the striker plate.
- Designed for BS7950 security windows.
- No shootbolt required.
- R.A.I.L Reach version available for low handle heights.
- 7.7 , 9 and 10.5mm cam heights.
- 20 and 22mm backset versions available.
- Available in 200mm to 1200mm



Length	Size	BS	 7.7	 9.0	 10.5
200	GR.1 200mm	20mm	202693	201927	202691
400	GR.2 400mm	20mm	202694	201928	202690
600	GR.3 600mm	20mm	202695	201929	202689
800	GR.4 800mm	20mm	202696	201930	202688
1000	GR.5 1000mm	20mm	202697	201931	202687
1200	GR.6 1200mm	20mm	202698	201932	202686
200	GR.1 200mm	22mm	58490	58492	204253
400	GR.2 400mm	22mm	58496	58497	58498
600	GR.3 600mm	22mm	58504	58505	58503
800	GR.4 800mm	22mm	58511	58512	58510
1000	GR.5 1000mm	22mm	58518	58519	58517
1200	GR.6 1200mm	22mm	58525	58526	58524



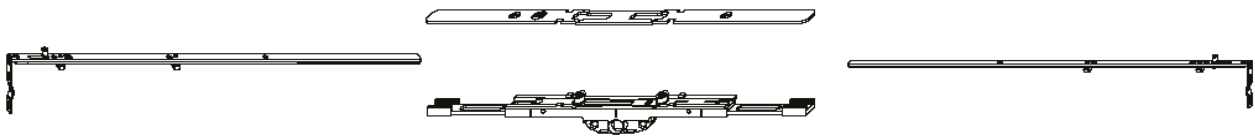
MACH II Shootbolt Espagnolette Croppable Extension Pieces



MACO MK11 SHOOTBOLT

Protective Coating-

Zinc plated/ Silver passivated / wax coated finish. Tested in accordance with ISO9227:1990, BS7479:1991 and DIN 50021/SS for 360 hours in a salt spray environment.



Croppable Shootbolt Extensions				
Size	Sash Rebate Size (MM)	Mush per Ext	7.7mm Mushroom	9.0mm Mushroom
GR.1	382-450	0	28215	28216
GR.2	451-920	1	28610	28611
GR.3	801-1100	1	58035	58037
GR.4	1101-1400	1	58036	58038
	250mm Extension Piece	1	10194	10195

MK11 Drive Gear Croppable		
BS	7.7mm Mushroom Silver	9.0mm Mushroom Silver
20	11038	11048
22	11041	11050

Non-Croppable Shootbolt Extensions				
Size	Sash Rebate Size (MM)	Mush per Ext	7.7mm Mushroom Silver	9.0mm Mushroom Silver
GR.1	500-600	0	58140	58148
GR.2	601-700	1	58141	58149
GR.3	701-800	1	58142	58150
GR.4	801-900	1	58143	58151
GR.5	901-1000	1	58144	58152
GR.6	1001-1100	1	58145	58153
GR.7	1101-1200	1	58146	58154
GR.8	1201-1300	1	58147	58155
GR.9	1301-1400	1	58148	58156
-	250mm Extension Piece	1	11804	-
-	400-600mm Extension Piece	1	206437	206509

MK11 Drive Gear Non Croppable		
BS	7.7mm Mushroom Silver	9.0mm Mushroom Silver
20	11033	11035
22	11034	11037

MACO MK1 SHOOTBOLT



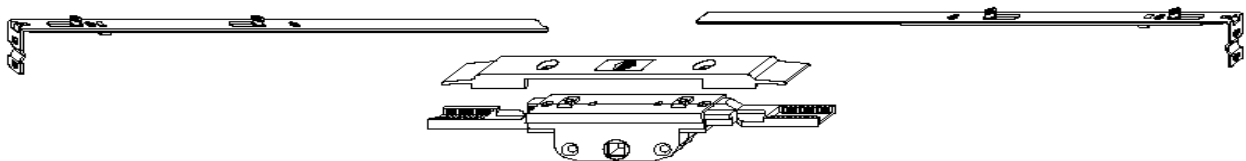
Extension Pieces

Extension pieces can be added so that the handle can be fitted below the centre of the sash.



Striker Plates

Manufactured bespoke for individual profile systems ensures that the security and performance of the window is maximised.



- Designed for profiles with eurogrooves.
- Fast fit assembly with a minimum of components.
- Profile designated striker plates with a Night Vent position.
- Adjustable length shootbolt throw.
- Passive shootbolt for security purposes only.
- Compression is achieved by adjustable mushroom bolts, on sash rebate sizes over 400mm.
- Small lockcase prep size for maximum profile strength.
- Available in 20 and 22mm backsets, with 7.7, 9.0 and 10.5mm high mushroom bolts.
- Mushroom, and shootbolt striker plates interlock for maximum security.
- Shootbolt striker plates are designed to act as anti-jimmy devices.
- Total lockcase depth is only 7mm more than backset.
- Tested to 7.4Kn, more than double the current requirements of BS7950:1997

Multipoint locking shootbolt espagnolette for side hung or top hung applications with adjustable shootbolts and mushroom cams and designed for profiles with eurogroove. The Maco Shootbolt Espagnolette has a separate centre lock box with various different types of croppable extension with two backsets and three cam heights. The Maco Shootbolt Espagnolette is compatible with all standard espag handles with 43mm fixing centres with a 7mm square spindle and is capable of achieving BS7950.

Reverse Action Drive Gear	
Silver No	Backset
57175	20mm + Cover Holder
57176	22mm + Cover Holder

Shootbolt Extension Pieces					
7.7mm Mushroom	9mm Mushroom	10.5mm Mushroom	Size	Sash Rebate Size	Mush Per Ext
58177	58177		GR.0	320 - 400mm	-
58160	58161	58157	GR.1	401 - 800mm	1
58162	58162	58158	GR.2	801 - 1100mm	2
58164	58165	58159	GR.3	1101 - 1400mm	2

MACO FRENCH CASEMENT GEAR

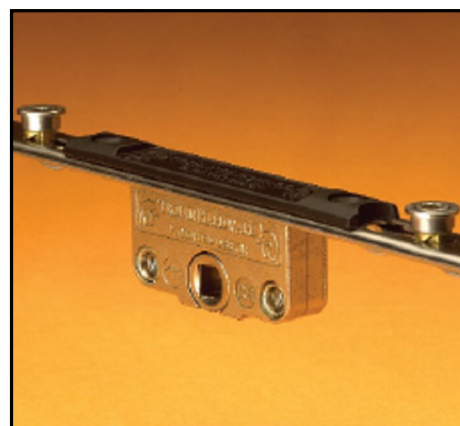
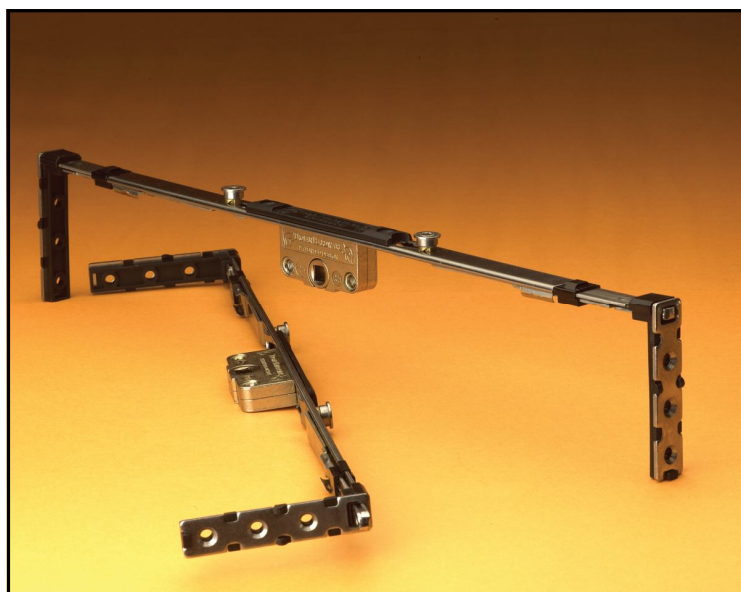


French MK1 & MK2 Shootbolts allow the manufacturer to assemble windows without the centre mullion.

- Can be used with MK1 & MK2 Shootbolt Drive Gears
- Extensions from MK1 & MK2 Can be used on Main Sash.
- Extensions for Slave without cams to suit sash rebate of 600 - 1400mm.
- Extensive range of keepers to suit most PVC-u systems
- No centre mullion.

Please contact our sales office for more information.

Slave Sash Croppable Shootbolt Extensions			
Size	Sash Rebate Size (MM)	Mush per Ext	Part Number
GR.1	600-1000	0	57141
GR.2	1001-1400	0	57142



For Eurogroove systems the Stallion 2 is a quick fit telescopic shootbolt that requires no cropping or cutting. It incorporates some added feature benefits including a unique clip in action to the Eurogroove, an automatic self setting action that sets the shootbolt at the required length and rising locking cams to maximise engagement and frame clearance. The Stallion 2 is largely Stainless Steel in construction to meet ever increasing

Testing And Accreditation

UKAS laboratory tested to BS EN 1670:1998 and have exceeded grade 4 classification.
 For ultimate corrosion resistance.
 Tested to over 30,000 cycles under operational load.
 Has attained BS7950 across a comprehensive range of window systems.
 Has Secured by Design accreditation.
 Has BBA accreditation. Certificate No. 2769.

Product Material Specifications

Zinc diecast components - ZA2 with Zinc passivate finish.
 Stainless Steel parts are - 430 S17 or 304 stainless steel.
 Gearbox reverse gears - carbon steel 70 (CS70).
 Plastic parts are glass reinforced Nylon 66.

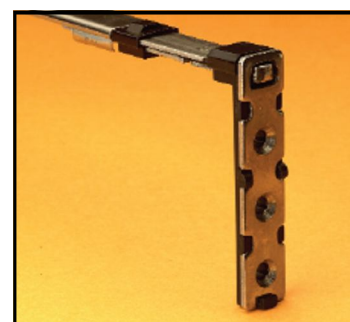
Sash Rebate Ranges

Standard Sizes

- Size 1 = 300mm - 400mm
- Size 2 = 400mm - 540mm
- Size 3 = 540mm - 820mm
- Size 4 = 820mm - 1300mm
- Size 5 = 1300mm - 1750mm

Offset Sizes

- Size 4-2 = 610mm - 920mm (410 - 650 long 200 - 270 short)
- Size 4-3 = 680mm - 1060mm (410 - 650 long 270 - 410 short)
- Size 5-2 = 850mm - 1145mm (650 - 875 long 200 - 270 short)
- Size 5-3 = 920mm - 1285mm (650 - 875 long 270 - 410 short)



Key Product Features

- Stainless Steel construction for ultimate corrosion resistance.
- Fast-Fit telescopic design with auto setting function which reduces fabrication time with no need for cropping.
- Clips into Eurogroove reducing the number of screws required.
- Rising cam system which provides better sash to frame clearance.
- Compression adjustable locking cams.
- Supplied as a kit, complete with keeps.
- High Security Accredited.
- BBA Accredited.