

Window, Door and Curtain Wall Testing

AAMA/WDMA/CSA 101/I.S.2/A440-08

TEST REPORT

Render to:

Windloch Windows

TITLE	SUMMARY OF RESULTS
Product manufacturer:	Windloch Windows
Product type:	Architectural terrace door
Product series/ model:	DS-75
Primary product designator:	Class: AW - PG60 ATW 48"x120" (1219.2mm x 3048mm)
Force entry resistance:	Grade 10
Air infiltration @6.24 PSF :	0.01 < cfm/ft ² (0.05 <L/sm ²)
Water penetration resistance:	25 Psf (1197 Pa)
Test completion date:	04/15/15
Report # 15-009-B	



Window, Door and Curtain Wall Testing

Report No: 15-009-B Test Completion Date: 4-15-15 Report Date: 4-16-15 Report Retention Date: 4-16-25	Client: Windloch Windows 467 Brooke AVE – Unit C Deer Park, NY 11729
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Test Specification

AAMA/WDMA/CSA 101/I.S2/A440-08 “NAFS North American Fenestration Standard/Specification for Windows, doors, and unit skylights”.

Test Specimen Designation

Model: DS-75

Class: AW - PG60 ATW 1219.2mm x 3048mm (48”x120”)



Window, Door and Curtain Wall Testing

Frame

The frame members are extruded aluminum.

Overall dimensions are 48"x120" (1219.2mm x 3048mm)

Head and Jambs: All made from extrusion part number 754504.

Sill: Made from extrusion part no. 753602

Corners: Mitered with two snap fit joining corner keys per corner located in aluminum extrusion cavity's. Corner keys are part no. 900353

Sash

Sash members are made of extruded aluminum. The Overall dimensions of the sash is 1138.24 mm x 2976.56 mm (44-13/16" x 117-3/16").

Top/Bottom Rail and Left/Right Styles: All made from extrusion product code 751081.

Glazing bead: made from extrusion product code 312137

Corners: Mitered with two corner keys per corner located in aluminum extrusion cavity's. Each corner has one snap fit joining key part no. 900341 and one corner cleat part no. 900014. corner keys epoxied in place via injection through small holes.

MT Group	MT Group	MT Group	MT Group	MT Group	MT Group
145 Sherwood Av Farmingdale, NY 11735 (631) 815-1920 Office (631) 815-1901 Fax		403 County Rd, Suite 1 Cliffwood, NJ 07721 (732) 725-6177 Office (732) 725-6180 Fax			Page 3 of 11 Report # 15-009-B DRAFT

Window, Door and Curtain Wall Testing

Weather seals

QTY	Location	Description
4 Rows	Inside jamb head and sill	Goose neck center gasket serves as primary seal part no 910001.
4 Pcs	Inside corners of frame	Corner piece (90002) has same cross section as 910001 and interlocks with primary gasket to make a continuous seal
4 Rows	On door sash flange leg of stiles and rails	Rebate gasket 912005 for compression when closed
4 Rows	On frame flange leg jambs, head and sill	Rebate gasket 912003 for compression when closed
4 Rows	Exterior glazing leg of sash rails and stiles	Outer glazing gasket 911025
4 Rows	Interior glazing bead	Inner glazing gasket 913070
1 Pcs	Deadbolt striker	Latex sheet gasket for deadbolt

Glazing:

Glass Size	IG thickness	Glass thickness	Glass type	Spacer Thickness	Spacer type	Identification
37-5/8" x 109-15/16" (955.68 mm x 2768.6mm)	1" (25.4 mm)	1/4"	Tempered	1/2" (12.7 mm)	Aluminum	Local vendor

The unit is interior dry glazed with a continuous heal bead and backer rod around the IG. Glazing has rubber gasket on both sides. One side is wedge gasket with aluminum glazing bead. The glass is held in place using aluminum glazing beads (part no. 312137) with inner glazing gasket (Part No. 913070 Glazing Bead Gasket W/Ridged Backing). There is a 15.875 mm (5/8") glass bite.

Drainage System

QTY	Title	Description	location
3	Weeps with flapped covers	1.25" x 0.25" weep hole on sill	Centered 6.25" from either end and one in the middle of unit on front face of sill
2	Weep hole	0.2" circular hole to drain water that may collect in jambs	3.5" from bottom of unit inside each jamb
2	Weep holes	Sash rail weep holes weep door into tank	9.5" and 34.5" from left edge of door
12	Weep holes	0.2" circular hole to drain water that may collect on top of sill	On top face of sill there is four above each weep with flapped cover (two in each track per flapped weep).

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Hardware

QTY	Title	Location	Description
4	Hinges 900598	Centered at 3.5", 54", 94.5" and 107" from bottom	Door hinge XXL
2	Handle set 902478	42" from bottom on unit	Prima Handle
11	Keepers part no. 901347	Viewing unit from out side. Keeper positions (901347) on left jamb is 9.5", 20.25", 31.25", 55.25", 69", 82.5, 96.5" and 110.25" from bottom of unit. Keeper (901347) on head at 24" from right side of unit. Keepers (901347) on bottom stile at 31.75" and 16.25" from right of unit.	Adjustable single striker on frame
11	Fixed connecting joint locking point	Viewing unit from out side. Locking point positions (904047) on left jamb is 9.5", 20.25", 31.25", 55.25", 69", 82.5, 96.5" and 110.25" from bottom of unit. Locking point (904047) on head at 24" from right side of unit. Locking point (904047) on bottom stile at 31.75" and 16.25" from right of unit.	Locking points on sash
2	Adjustable fastening element	On right jamb two keepers (901350) at 35.5", 76.5" from bottom edge of unit.	Additional locking point reinforcement at mid spans between hinges
2	Corner drive 904019	Sash corners	Relays drive of multi-point wrap around locking system
1	Double Key cylinder 904473 and cover 902430	Handle stile	Key cylinder that can be operated on both sides of door

Interior & Exterior Surface Finish:

All aluminum is painted with a semi-gloss gray finish



Window, Door and Curtain Wall Testing

Sealant Application:

Sealant is applied to inside corners of frame and sash

Insect Screen:

None

Installation:

Unit is installed into a 2x8 Douglas fir buck with a total of twenty anchors three inches wide made from extrusion no. 900016.

The jambs have anchors centered at 6.5", 27.5", 49.5", 71.5", 92.5" and 115" from bottom of unit.

The head and sill have anchors centered at 6.5" , 18.25" , 30.75" , and 42.5" from the right edge of unit.

Each anchors has a one screw that fastens it to the buck. The anchor slides in via t-slot type interlock into channels in frame extrusion

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Window, Door and Curtain Wall Testing

Air and Water Test Results

Paragraph	Test	Result	Allowable
(5.3.2)	Air Infiltration ASTM E283 @300 Pa (6.24psf)	Pass < 0.05 L/sm ² < 0.01 cfm/ft ²	0.5 L/sm ² 0.1 cfm/ft ²
(5.3.2)	Air Infiltration ASTM E283 @75 Pa (1.57psf)	Pass < 0.05 L/sm ² < 0.01 cfm/ft ²	0.5 L/sm ² 0.1 cfm/ft ²
(5.3.3)	Cyclic Water Penetration ASTM E547 @ 575 Pa (12Psf)	Pass	No Water
(5.3.3)	Static Water Penetration ASTM E331 @ 575 Pa (12Psf)	Pass	No Water
(5.3.3)	Cyclic Water Penetration ASTM E547 @ 718.2 Pa (15Psf)	Pass	No Water
(5.3.3)	Static Water Penetration ASTM E331 @ 718.2 Pa (15Psf)	Pass	No Water
(5.3.3)	Cyclic Water Penetration ASTM E547 @ 957.6 Pa (20Psf)	Pass	No Water
(5.3.3)	Static Water Penetration ASTM E331 @ 957.6 Pa (20Psf)	Pass	No Water
(5.3.3)	Cyclic Water Penetration ASTM E547 @ 1197 Pa (25Psf)	Pass	No Water
(5.3.3)	Static Water Penetration ASTM E331 @ 1197 Pa (25Psf)	Pass	No Water

Window, Door and Curtain Wall Testing

Operation Cycling, Misuse Test, And Forced Entry Results

Paragraph/s	Test	Result	Allowable
(7.3.5)	Life Cycle ASTM 910-10 12,500 Vent and Lock cycles Cycles as per AAMA 920-03	Pass	No breakage
(5.3.6.11) (5.3.1.2.2) (5.3.1.2.1)	Vertical Loading Resistance of side hinged door leaves AAMA 925-07 @ 2,230 N (500 lbf) for 300 s	Max vertical deflection = 0.08" Force to latch = 10 lbf Force to dead bolt = 35lb Force to release deadbolt = 45 lb No change in operating forces or leaf diagonals observed after load application	No breakage
(7.3.5)	Life Cycle ASTM 910-10 12,500 Vent and Lock cycles Cycles as per AAMA 920-03	Pass	No breakage
(5.3.5)	Forced Entry ASTM F588	No Entry Grade 10	No Entry

Window, Door and Curtain Wall Testing

Air and Water Test Results After Operational Cycling

Paragraph	Test	Result	Allowable
(5.3.2)	Air Infiltration ASTM E283 @300 Pa (6.24psf)	Pass < 0.05 L/sm ² < 0.01 cfm/ft ²	0.5 L/sm ² 0.1 cfm/ft ²
(5.3.2)	Air Infiltration ASTM E283 @75 Pa (1.57psf)	Pass < 0.05 L/sm ² < 0.01 cfm/ft ²	0.5 L/sm ² 0.1 cfm/ft ²
(5.3.3)	Cyclic Water Penetration ASTM E547 @ 575 Pa (12Psf)	Pass	No Water
(5.3.3)	Static Water Penetration ASTM E331 @ 575 Pa (12Psf)	Pass	No Water
(5.3.3)	Cyclic Water Penetration ASTM E547 @ 718.2 Pa (15Psf)	Pass	No Water
(5.3.3)	Static Water Penetration ASTM E331 @ 718.2 Pa (15Psf)	Pass	No Water
(5.3.3)	Cyclic Water Penetration ASTM E547 @ 957.6 Pa (20Psf)	Pass	No Water
(5.3.3)	Static Water Penetration ASTM E331 @ 957.6 Pa (20Psf)	Pass	No Water
(5.3.3)	Cyclic Water Penetration ASTM E547 @ 1197 Pa (25Psf)	Pass	No Water
(5.3.3)	Static Water Penetration ASTM E331 @ 1197 Pa (25Psf)	Pass	No Water

Window, Door and Curtain Wall Testing

Structural Testing Results

Paragraph	Test	Result	Allowable
(5.3.4.2)	Preload ASTM E330 @ 1436.41 Pa Positive (30 PSF)	Pass	No breakage
(5.3.4.2)	Preload ASTM E330 - 1436.41 Pa Negative (-30 PSF)	Pass	No breakage
(5.3.4.2)	Uniform Load max Deflection ASTM E330 @ 2872.81 Pa Positive (60 PSF) Frame jamb span between anchors	Pass < 0.01" (< 0.25mm)	L/175 3.3mm (0.13")
(5.3.4.2)	Uniform Load Max Deflection ASTM E330 - 2872.81 Pa Negative (-60 PSF) On Door Stile span between hinges	Pass < 0.01" (< 0.25mm)	L/175 3.3mm (0.13")
(5.3.4.2)	Uniform Over load permanent Deflection ASTM E330 @ 4309 Pa (Positive 90 PSF) On Top Sash Rail Frame jamb span between anchors	Pass < 0.01" (< 0.25mm)	0.2% L 0.04" (1mm)
(5.3.4.2)	Uniform Over load permanent Deflection ASTM E330 @ - 4309 Pa (Negative 90 PSF) On Door Stile span between hinges	Pass 0.03" (0.76 mm)	0.2% L 0.04" (1.02 mm)



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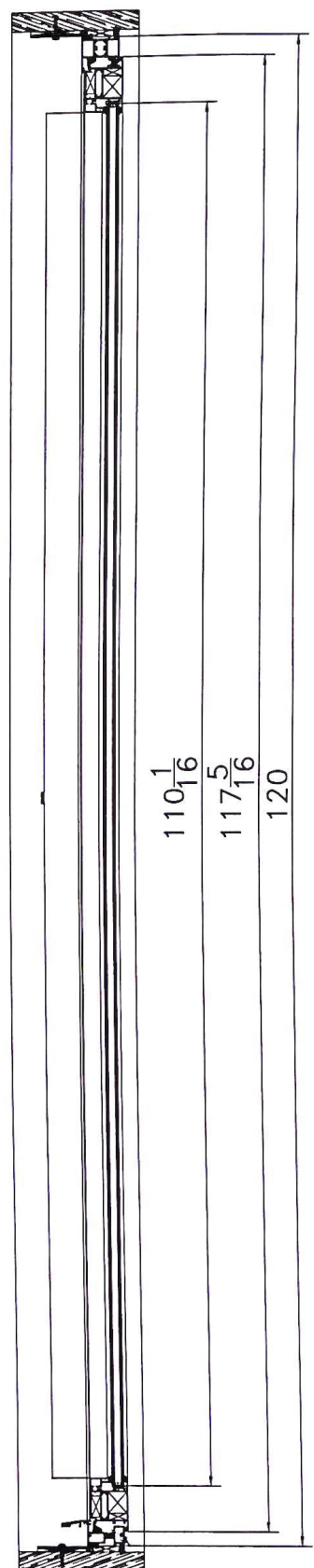
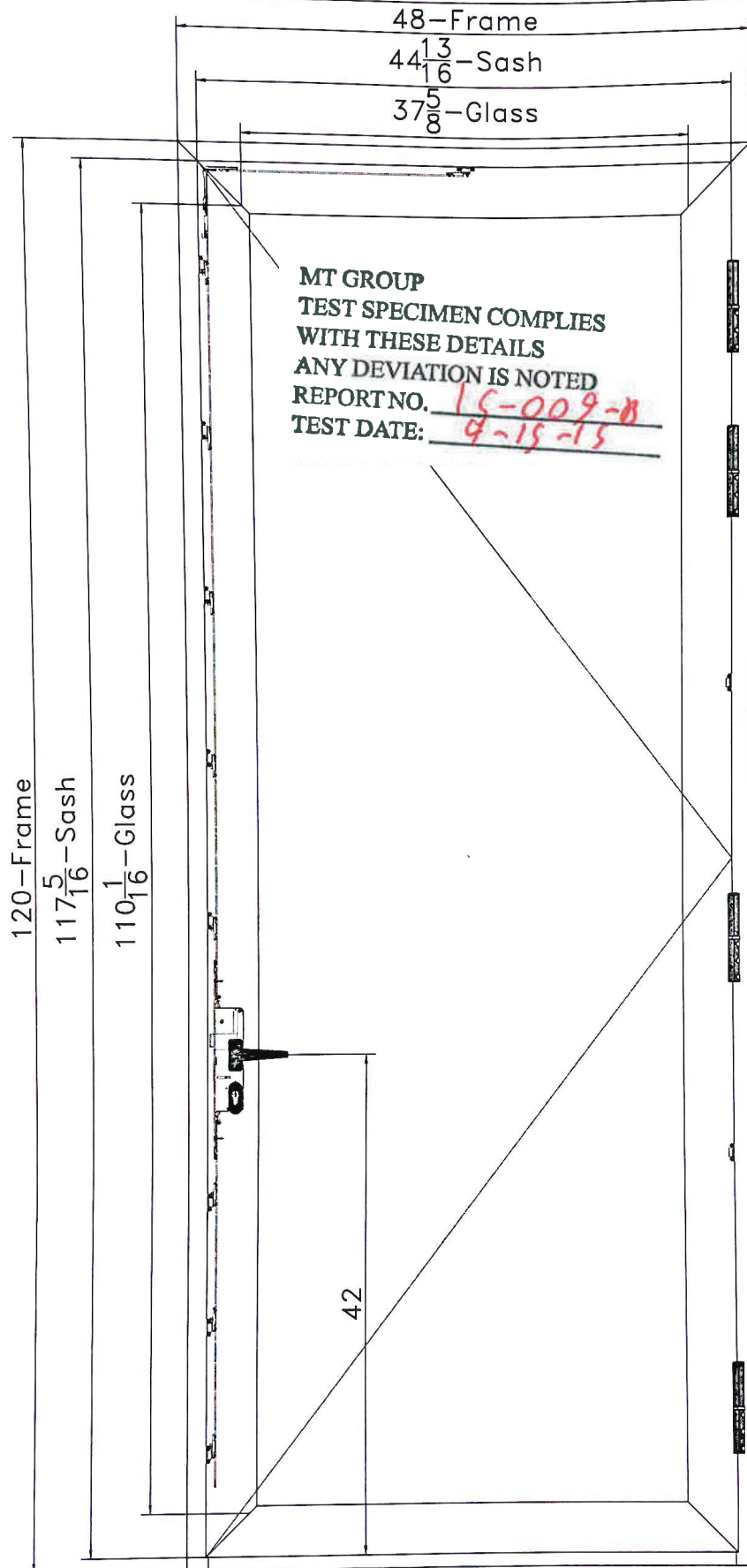
For Materials Testing Lab, Inc.

Craig Ginsberg
Mechanical engineer
4/16/15

Approved
by: _____

Frank Pennisi
Vice President
4/16/15

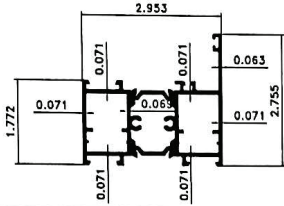
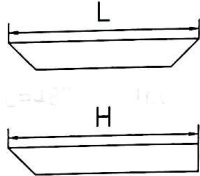
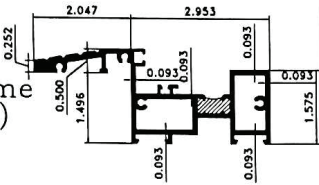

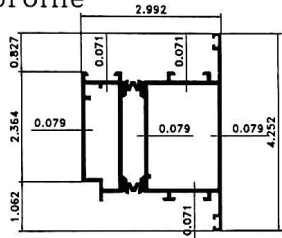
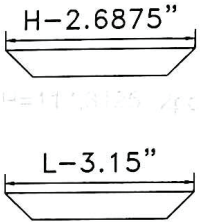
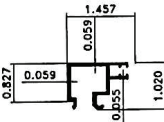
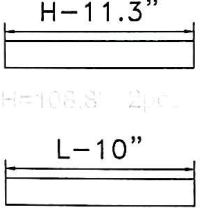
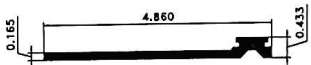
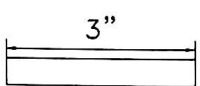
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WINDLOCH 467 Brook Avenue, Unit-C Deer Park, NY 11728 (718) 640-8395 (821) 840-7748 (845) 718-0800 Fax info@windloch.com WWW.WINDLOCH.COM	PROJECT NAME: 82 Wacker St.	CAD FILE: 15-009.dwg
	DESCRIPTION: Out swing Door Elevation	DATE: Apr/27/18 SCALE: 1/8"
DESIGN BY: YUJIN BAE-SHINOH	SYSTEM MODEL: Windloch 08-18	DRAWING NUMBER: 201

SERIES DS-75 - Aluminum Door

BILL OF MATERIALS

Art. No.	Description	Material	Quantity	Produced By
754504	Frame 	Aluminum A6063-T6	 L H	KEYMARK CORPORATION
754001	Frame (Sill) 	Aluminum A6063-T6	 L	KEYMARK CORPORATION
751081	Vent profile 	Aluminum A6063-T6	 H-2.6875" L-3.15"	KEYMARK CORPORATION
312137	Glazing Bead (1") 	Aluminum A6063-T6	 H-11.3" L-10"	KEYMARK CORPORATION
900016	Anchor Strap 	Aluminum A6063-T6	 3"	


PROFILES

MT GROUP
 TEST SPECIMEN COMPLIES
 WITH THESE DETAILS
 ANY DEVIATION IS NOTED
 REPORT NO. 15-009-8
 TEST DATE: 4-15-15

 **WINDLOCH**
 467 Brook Avenue, Unit-C
 Deer Park, NY 11729
 (718)-640-8391
 (631)-940-7745
 (941)-718-4868 Fax
 info@windloch.com
 WWW.WINDLOCH.COM

PROJECT NAME: 52 Wooster st.		CAD FILE : 52W.dwg	
DESCRIPTION: Out swlng Door Profiles List		DATE: May/11/15	REV. 1
DESIGN BY: YOAV BEN-SHIMON		SCALE: 1:4	
SYSTEM MODEL: Windloch DS-75		DRAWING NUMBER: 301	

SERIES WS-75 - Aluminum Window
BILL OF MATERIALS

	Art. No.	Description	Quantity	Produced By
ACCESSORIES	902478	Prima Handle	2 pcs.	GIESSE
	904650	Multi lock Backset 45	1 pc.	GIESSE
	904473	Double Cylinder 71/31	1 pc.	GIESSE
	902430	Cylinder Cover	2 pcs.	GIESSE
	900598	Door Hinge Flash XXL	4 pcs.	GIESSE
	901347	Adjustable Single Striker	11 pcs.	GIESSE
	904047	Fixed Connecting Joint Mx-Mx	11 pcs.	GIESSE
	901350	Adjustable Fastening Element	2 pcs.	GIESSE
	904019	Corner Drive	2 pcs.	GIESSE
	900353	Corner cleat for the frame	8 pcs.	GIESSE
	900341	Corner cleat for the Vent	4 pcs.	GIESSE
	900014	Corner cleat for the Vent L-1.476"	4 pcs.	KEYMARK
		Corner cleat for the Vent L-0.689"	4 pcs.	
	903524  0.768	Connecting Rod L-14.069"	1 pc.	GIESSE
		Connecting Rod L-11.732"	1 pc.	GIESSE
Connecting Rod L-2.992"		4 pcs.	GIESSE	
Connecting Rod L-9.685"		2 pcs.	GIESSE	
Connecting Rod L-12.913"		4 pcs.	GIESSE	
	Connecting Rod L-19.213"	1 pc.	GIESSE	
950001	Water Drainage Cap	3 pcs.	Windloch	
GASKETS	910002	Center gasket	26.13 ft	Trelleborg
	911002	Corner Center gasket	4 pcs.	Trelleborg
	912003	Rebate gasket	26.68 ft	Trelleborg
	912005	Rebate gasket	27.27 ft	Trelleborg
	911025	Outer glazing gasket 2.5mm	24.61 ft	Trelleborg
	913070	Inner glazing gasket 7mm	24.61 ft	Trelleborg
GLASS		Double glazing: 1/4" SB60 #2 on Clear, Tempered 1/2 Air 1/4" Clear, Tempered		Solar Seal

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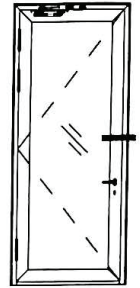


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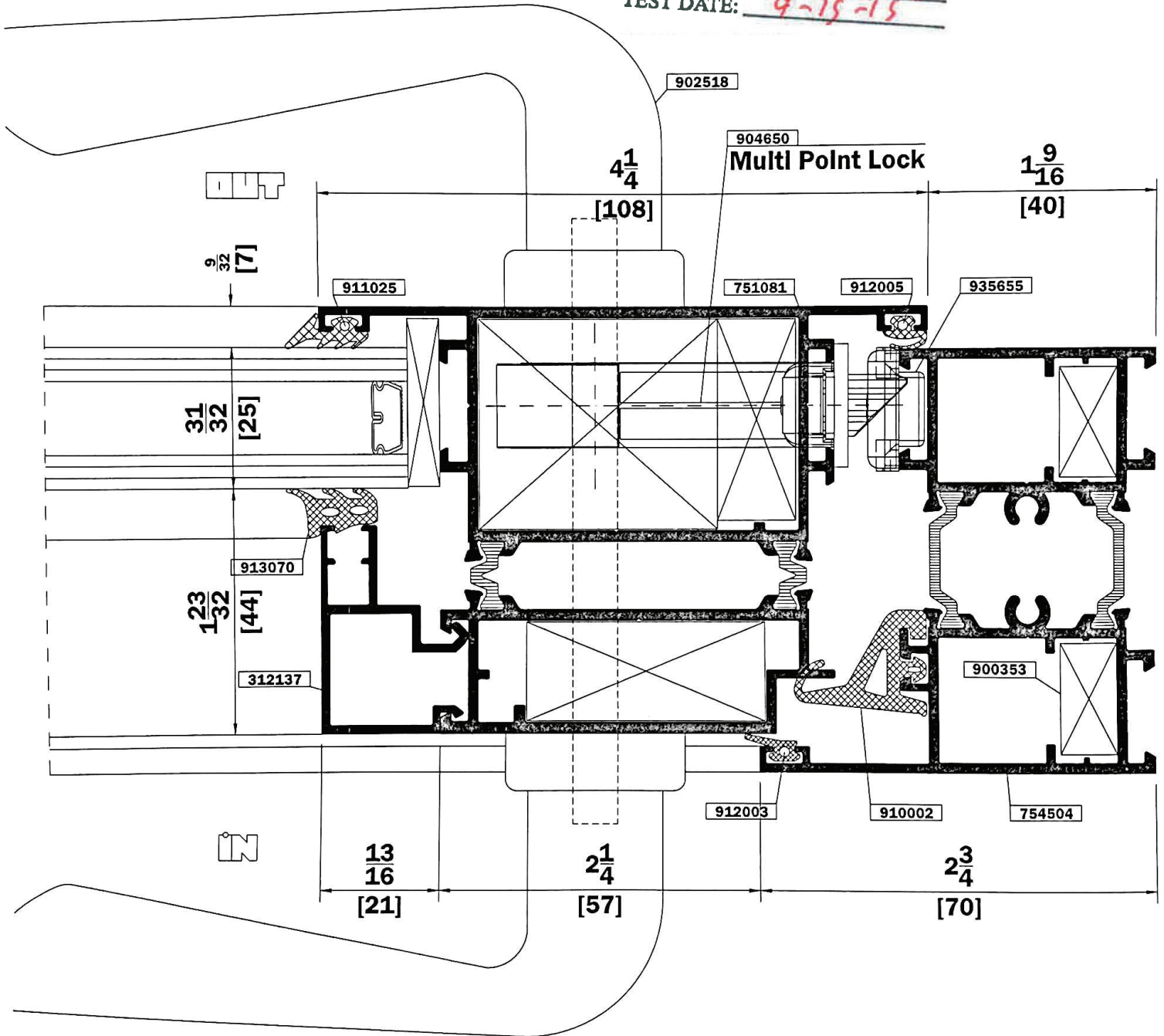
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(941)-718-4868 Fax
info@windloch.com
WWW.WINDLOCH.COM

PROJECT NAME: 52 Wooster st.		CAD FILE : 52W.dwg	
DESCRIPTION: Out swing Door Bill of Materlals		DATE: May/11/15	REV. 1
DESIGN BY: YOAV BEN-SHIMON		SCALE: 1:4	
SYSTEM MODEL: Windloch DS-75		DRAWING NUMBER: 401	

Out-Swing Door - 1" Insulated glass
Jamb detail with Lever Handle

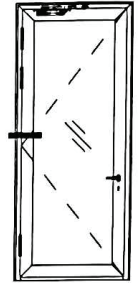


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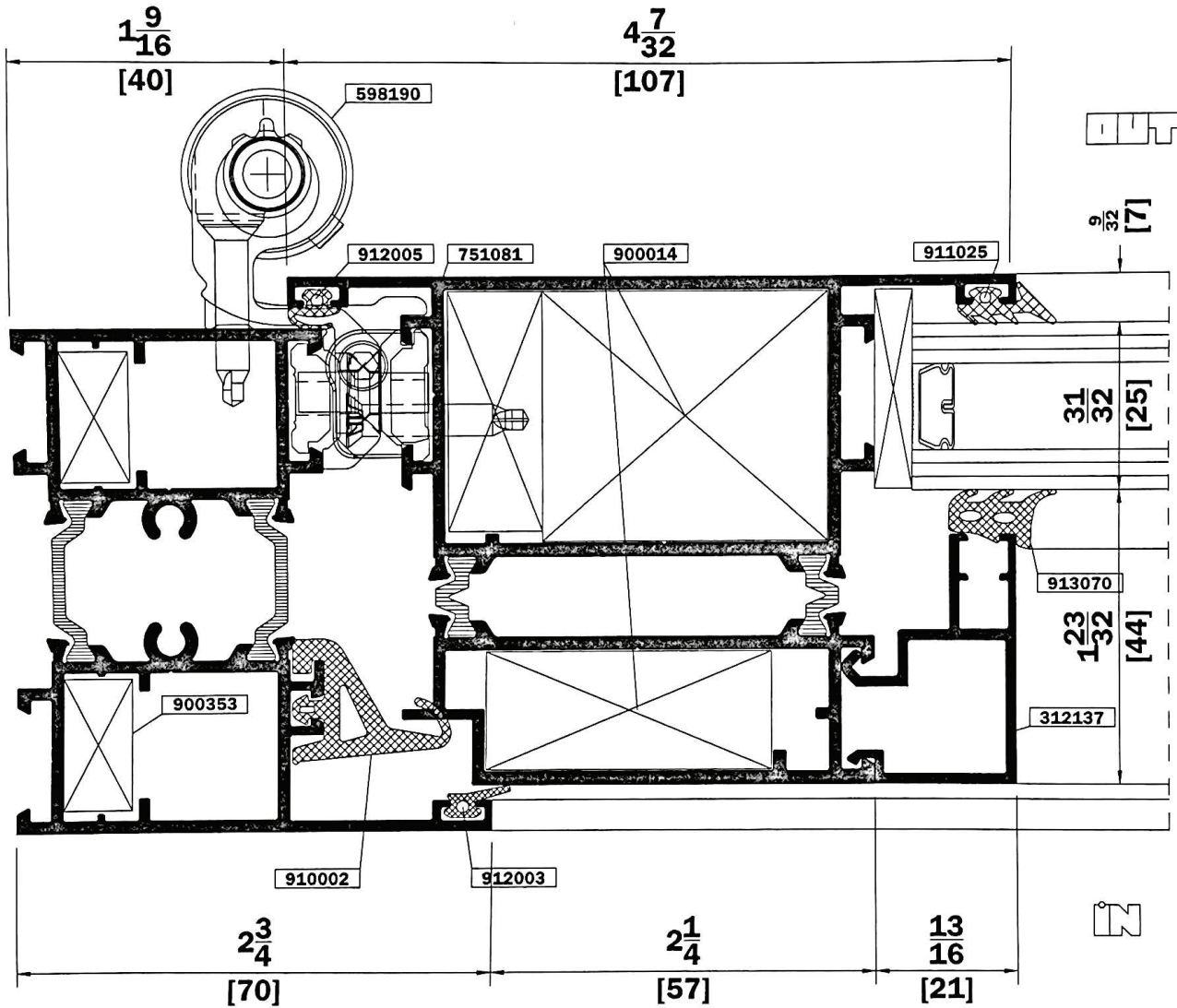


SYSTEM MODEL:	DS 75
CAD FILE :	DS-75 cat.dwg
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VER - DATE :	2- Jul/29/14
PAGE:	75-30-11

Out-Swing Door - 1" Insulated glass
Jamb detail with Barrel hinge

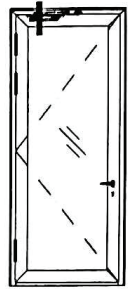


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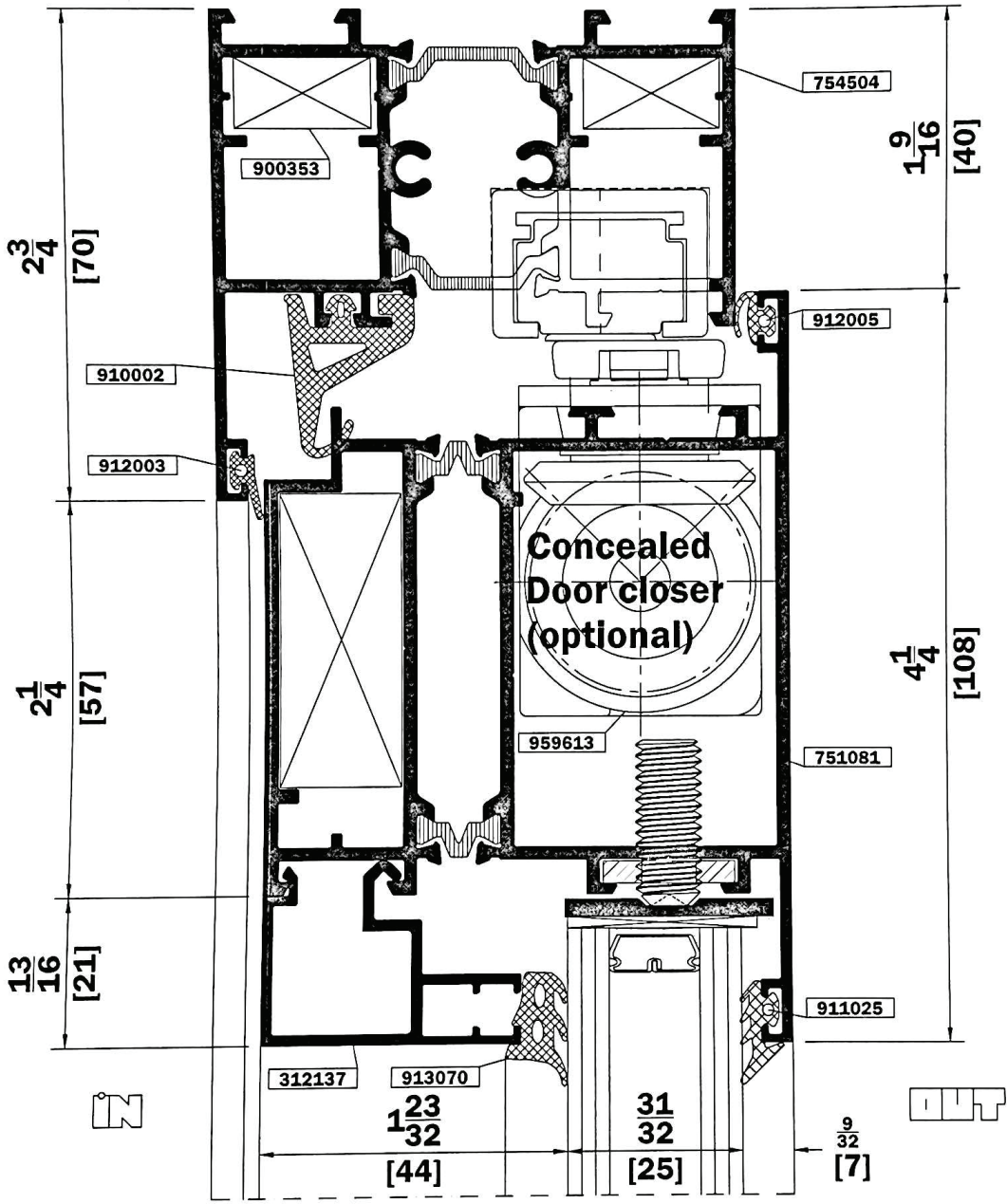


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Out-Swing Door - 1" Insulated glass
Head detail with Concealed door closer



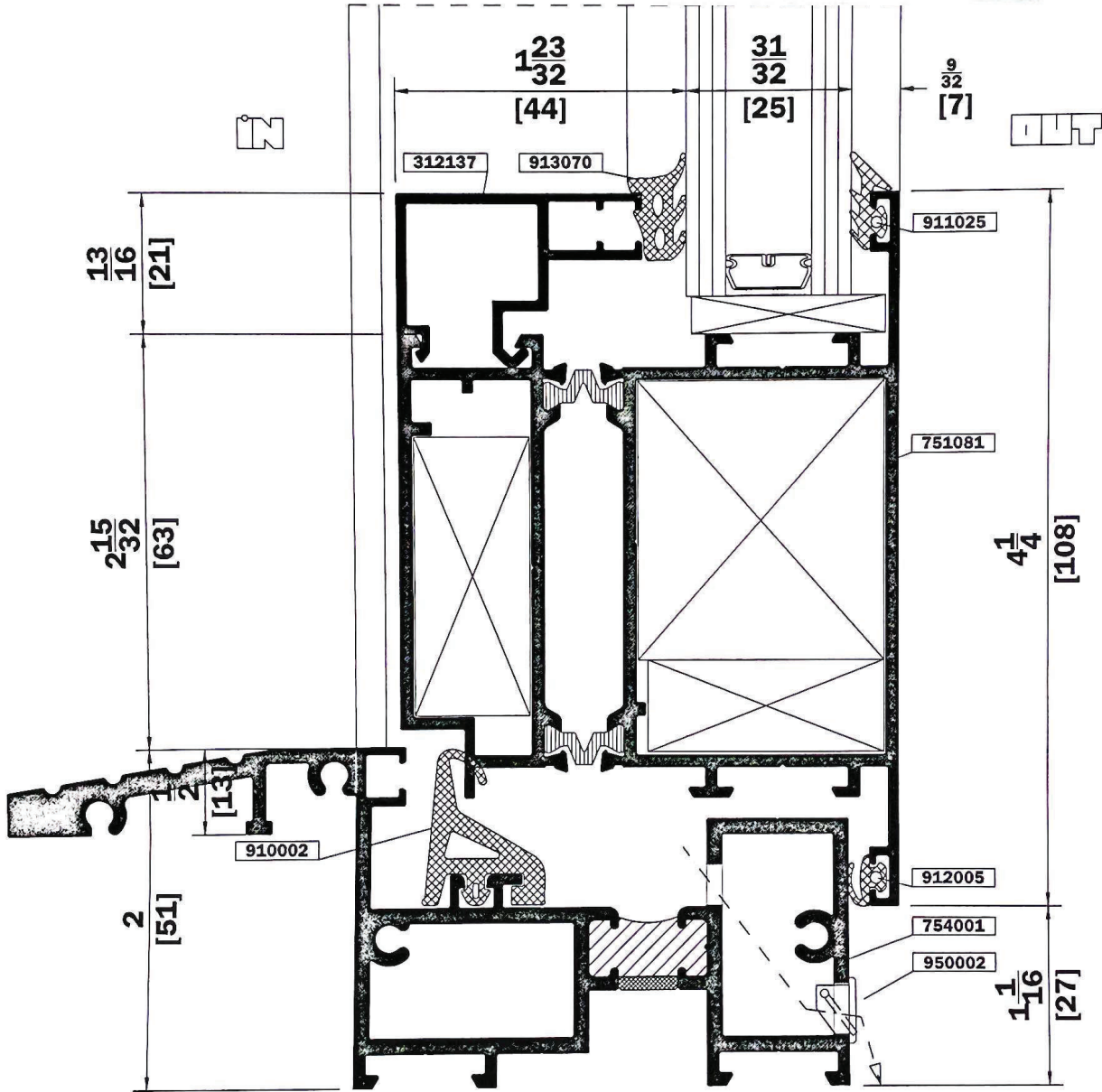
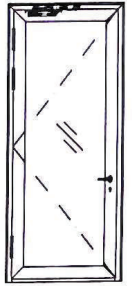
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TEST DATE: 9-15-15



SYSTEM MODEL:	DS 75
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VER - DATE :	2 - Jul/24/14
PAGE:	75-30-13

Out-Swing Door - 1" Insulated glass
Mid style Sill detail

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REPORT NO. 15-009-8
TEST DATE: 4-15-15



SYSTEM MODEL:	DS 75
CAD FILE :	DS-75 cat.dwg
SCALE:	1:1
VER - DATE :	2 - Jul/24/14
PAGE:	75-30-15

PRIMA HANDLE
902478
Functions

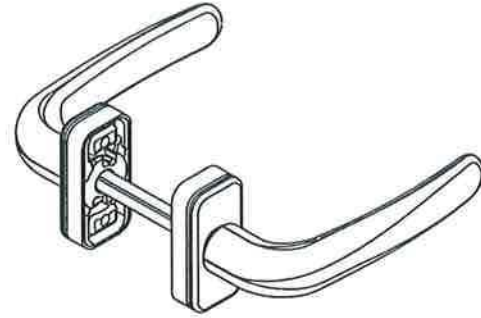
Pair of handles with stop, two handed, for mounting to the upright or central rail of the door.

Finish

Natural, paint finish in RAL colours and exclusive GIESSE cremone shades (dark brown, bronze and silver).

Packaging

Box of 20 pieces


Technical Features

Features a patented system which guarantees precise horizontal location of the handle.

The PRIMA handle is composed of a base, screw cover, extruded aluminium sheathe and rotor which, in combination with an elastic component, enables two-handed operation, stop and horizontal location.

The handle is made of die-cast aluminium and blends in seamlessly with the PRIMA cremone line.

The PRIMA handle is protected and finished with the GIESSE painting system, with its outstanding surface finish quality, uniform colours and excellent resistance to abrasion. The components are pretreated to guarantee resistance to scaling and sub-corrosion.

Materials

Reinforced black nylon base

Aluminium cover, sheath and handle

Galvanised zamak rotor

Stainless steel spring

Galvanised steel square pin and screws

MT GROUP

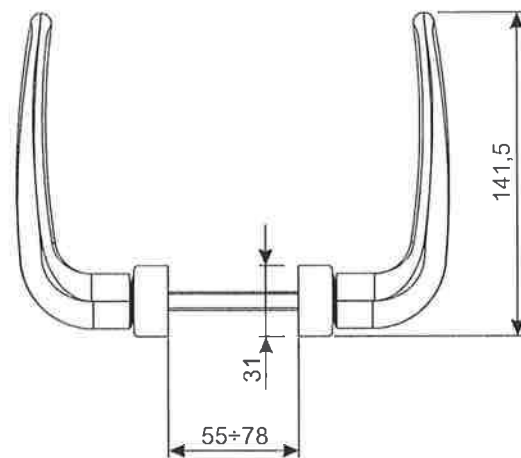
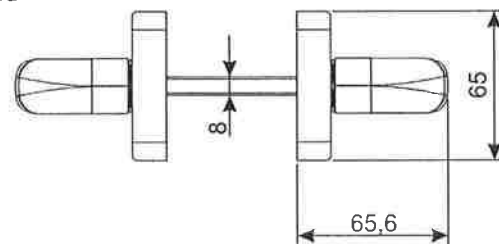
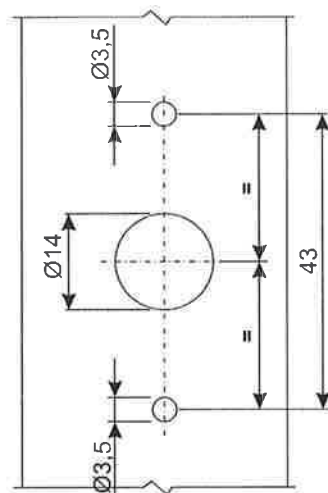
TEST SPECIMEN COMPLIES

WITH THESE DETAILS

ANY DEVIATION IS NOTED

REPORT NO. 15-004-B

TEST DATE: 4-15-15



SYSTEM MODEL: DS 75

CAD FILE: DS-75 cat.dwg

SCALE: 1:1

VER - DATE: 1 - Jun/19/14

PAGE: 75-60-12

MULTI LOCK BACKSET 45 904650

Functions

Lever Activated Terrace Door Lock with deadbolt, 45 mm backset, and 85 mm spindle-cylinder spacing.

Finish

Base finish

Packaging

Box of 5 pieces

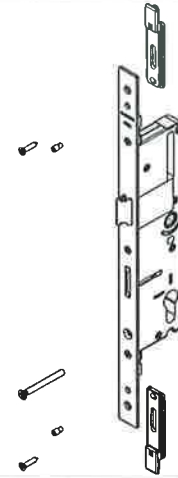
MT GROUP

TEST SPECIMEN COMPLIES
WITH THESE DETAILS

ANY DEVIATION IS NOTED

REPORT NO. 15-989+B

TEST DATE: 4-15-15



Technical Features

Used in combination with polyamide connecting rod and special adapters (included), the lock allows for multiple locking points that can be easily varied in size, quantity, and location around the door and frame.

- compatible with European profile cylinders
- latch, bolt and adapters drive through handle
- lock and unlock of the handle by the key
- handle-spindle-center-to-cylinder-center distance is 85 mm
- flat stainless steel faceplate, 378 x 22 x 2.5 mm
- galvanized zamak deadbolt, 6 mm thick x 20 mm long
- galvanized zamak reversible spring latch (right/left)
- zamak adapters for connection to polyamide rod
- galvanized steel internal and concealed components

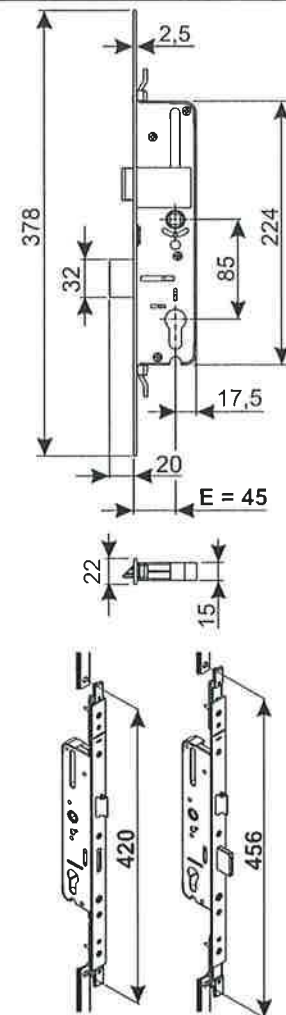
Note: A pair of handles (inside/outside) is required to operate the lock.

Parts

- n.2 rod connection blocks
- n.2 galvanized steel M4 connection pins
- n.1 cylinder fixing stainless steel screw M5x50
- n.2 galvanized steel, self threading mounting screw 3,9x19 to fit the lock
- Instruction sheets

Compatible accessories

- Adjustable faceplate for Eurogroove
- Giesse cylinders



SYSTEM MODEL:	DS 75
CAD FILE :	DS-75 cat.dwg
SCALE :	1:1
VER - DATE:	1 - Jun/19/14
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DOUBLE CYLINDER 904473

Functions

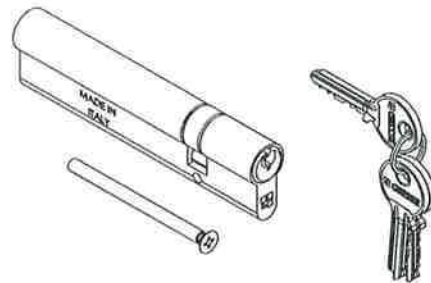
European profile cylinder 31/71.

Finish

Nickel plating, satin nickel color

Packaging

Box of 10 pcs

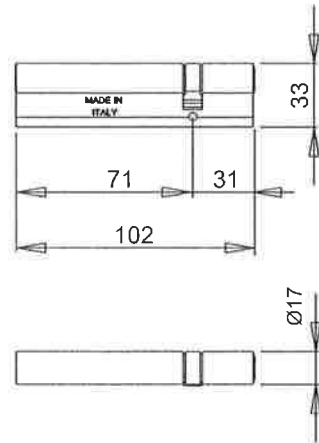


Technical Features

- 5 PINS (around 5.000 different combinations)
- nickel-plated brass body
- nickel-plated plug
- sintered steel projecting cam, DIN-compatible
- brass pins and drivers
- stainless steel springs
- nickel-plated brass keys
- 0,5 mm depth

Parts

3 keys with ring
flat head fixing screw M5x70



MT GROUP
TEST SPECIMEN COMPLIES
WITH THESE DETAILS
ANY DEVIATION IS NOTED
REPORT NO. 5-009-11
TEST DATE: 4-15-15

SYSTEM MODEL:	DS 75
CAD FILE :	DS-75 cat.dwg
SCALE :	1:1
VER - DATE:	1 - Jun/19/14
PAGE :	75-60-18

CYLINDER COVER 902430
Functions

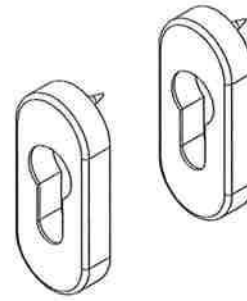
Cylinder cover with European shape

Finish

RAL base – Silver, gold and bronze anodized– Special Titanium finish

Packaging

Box of 10 set


Technical features

The set is composed by a nylon base, an aluminium cover and the self tapping screw.

The nylon base is fixed to the profile self-tapping screws.

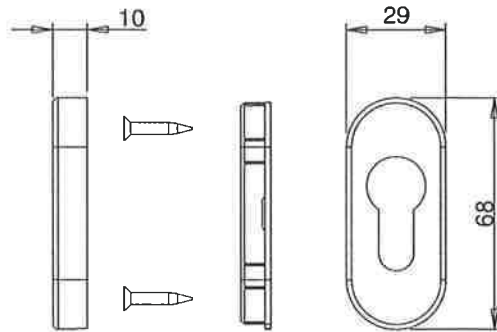
The aluminium cover is then snap-fitted on the nylon base.

Materials

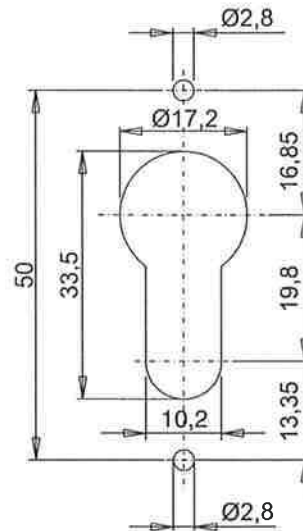
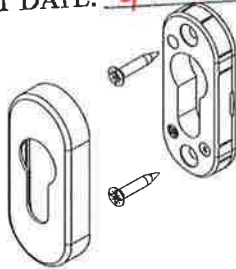
Nylon base

Aluminium covers

Self tapping galvanized screws 3,5x20



MT GROUP
 TEST SPECIMEN COMPLIES
 WITH THESE DETAILS
 ANY DEVIATION IS NOTED
 REPORT NO. 15-009-B
 TEST DATE: 4-15-15


SYSTEM MODEL: DS 75
CAD FILE: DS-75 cat.dwg
SCALE: 1:1
VER - DATE: 1 - Jun/19/14
PAGE: 75-60-19

DOORS HINGE FLASH XXL 900598

Functions

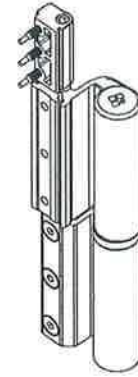
Hinge for heavy-duty doors made with a window profile. The profile is fastened by means of plates to be inserted as for conventional hinges for windows.

Finish

Elettrogiesse 9

Packaging

Box of 20 pieces



Technical Features

Clamp hinge designed for making large, heavy-duty doors with intensive use (special frames) that require high performance. Assembly to the profile is done by means of conventional plates to be inserted.

The hinge on the sash side is secured to the profile with 3 self-drilling screws M4,8x26 passing through the hinge body (fig. 1). The bearing between the hinge body on the wing side and the hinge body on the sash side ensures the door slides with the greatest ease even in particularly harsh working conditions due to heavy loads.

The hinge pin, which can be entirely or partly extracted, provides three different methods of fitting the wing onto the sash:

1. without extracting the pin, by lifting the wing
2. partially extracting the wing as far as the reference mark (fig. 3) when there is little room for manoeuvre
3. fully extracting the pin, making the wing slide on the floor and moving it next to the door panelling, in the case of particularly heavy wings.

Total or partial pin extraction is only possible after removing the grub screw (fig. 4) with the wing open (tamper-proof feature).

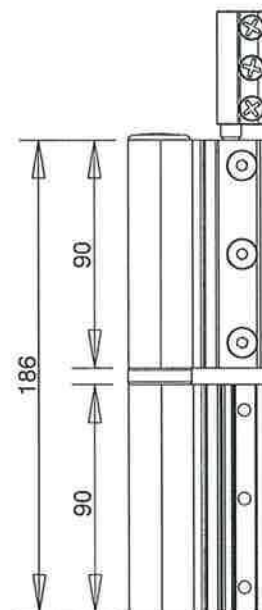
FLASH XXL is adjustable sideways and vertically with the door installed, which is an especially important feature for heavy doors.

The side adjustment (+/-1 mm) is made by turning the eccentric bush in the hinge on the wing side with the special key 03900.

The height adjustment (-2/+4 mm) is made by means of the plate secured to the wing by the hinge on the wing side with 3 self-drilling screws M4,8x26.

The wing is raised by adjusting the grub-screw using a 4 mm Allen key.

FLASH XXL has a special pre-loading plate that, set in the channel on the wing side by the lower hinge, forces the door to tilt sideways in the opposite direction to its natural fall and ensures alignment



MT GROUP

TEST SPECIMEN COMPLIES WITH THESE DETAILS

ANY DEVIATION IS NOTED

REPORT NO. 15-008-B

TEST DATE: 4-15-15

SYSTEM MODEL: **DS 75**

CAD FILE: **DS-75 cat.dwg**

SCALE: **1:1**

VER - DATE: **1 - Jun/19/14**

PAGE: **75-60-20**

900598

between the wing and sash even under conditions with a particularly high load.

The pre-loading plate has two different pre-loads, which are identifiable with the markings on the plate, of 1,4 mm (reference 1,4) for the lower hinge and 0,7 mm (reference 0,7) for a middle hinge (fig. 5).

On completing side adjustment the plug is never eccentric to the hinge. The lower portion of the pin has an M6 threaded hole to accommodate a trade screw, when needed, to permit extracting the pin with the wing installed, with the aid of pliers.

The hinge is equipped with an aluminium cover for the hinge on the wing side and the hinge on the sash side (art. 00599).

Parts

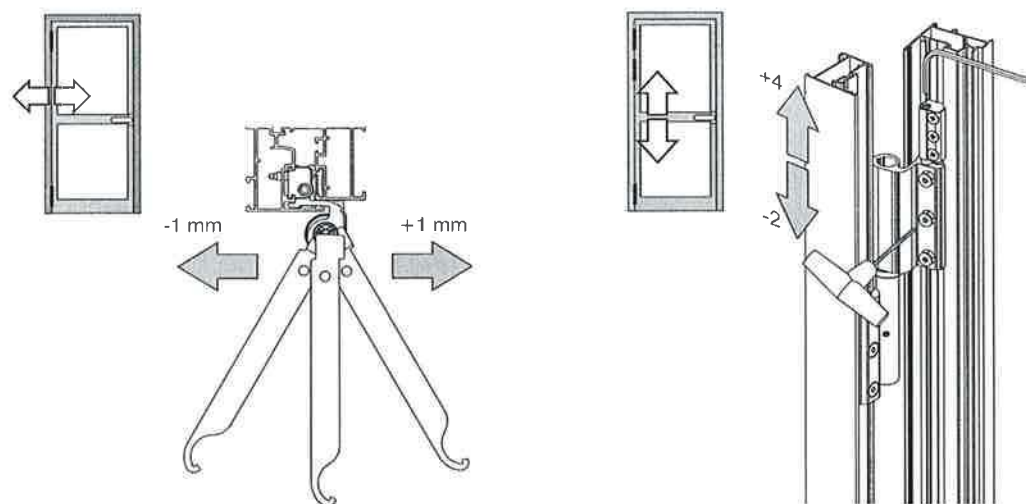
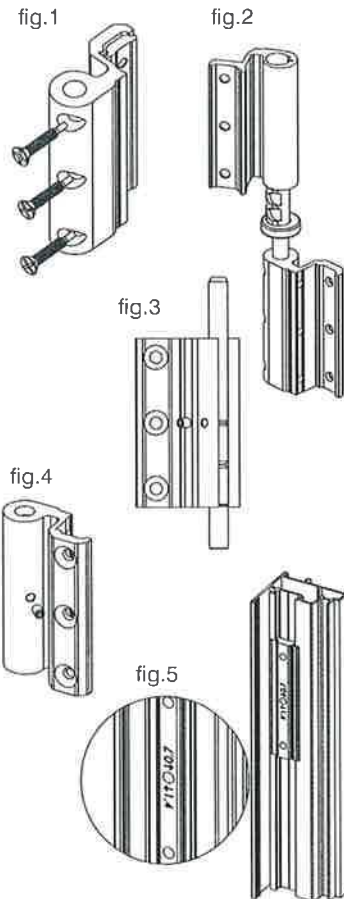
- 1 fixing plate for hinge on wing side
- 2 fixing plates for hinge on sash side
- 1 special pre-loading plate
- 1 height adjustment plate
- 12 hex screws M6x12 UNI 5933
- 9 special self-tapping screws M4.8x26
- Instructions sheet

Materials

- Extruded aluminium hinge with elettrogiessie 9 finishing
- Fixing plates in extruded aluminium
- Height adjustment plate in die-cast zamak
- Steel bearing
- Stainless steel pin, screws and grub screw fastening pin
- Height adjustment plate grub screw in galvanized steel
- Acetylic resin bush
- Nylon plug

Capacity

- Max load capacity of 160 kg tested in conformity with the EN1935:2002 standard.
- CE marking in class 14.


MT GROUP

TEST SPECIMEN COMPLIES
WITH THESE DETAILS

ANY DEVIATION IS NOTED

REPORT NO. 15-009-B

TEST DATE: 4-15-15

SYSTEM MODEL: DS 75

CAD FILE: DS-75 cat.dwg

SCALE: 1:1

VER - DATE: 1 - Jun/19/14

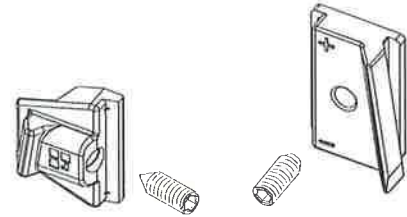
PAGE: 75-60-21

ADJUSTABLE FASTENING ELEMENT
901350
Functions

The adjustable fastening element serves to create additional closure points on any aluminium door or window frame, thereby making the entire structure more penetration resistant. Can be installed on unassembled or assembled frames.

Finish
Natural

Packaging
Box of 50 units

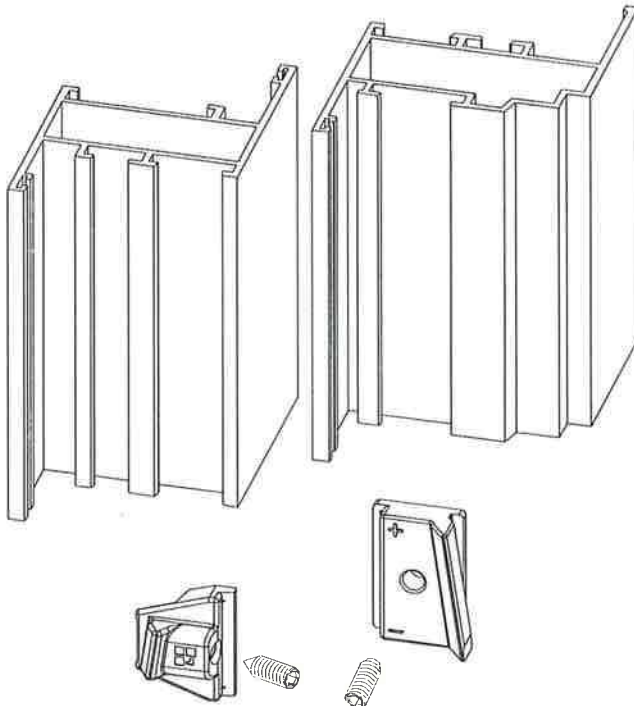

Technical features

Comprises two elements: striker and fastener. These components can be fixed easily without applying undue force and without requiring special machining. The adjustment facility serves to optimize the pressure exerted by the sash on the frame.

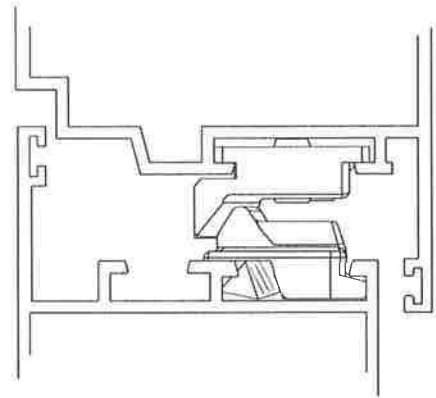
The fastening element is mounted on the hinge side and is recommended for use on doors and windows with widely spaced hinges.

Materials

SILVER PLUS GS Zamak body
Stainless steel screws



TEST DATE: ~~15-09-15~~ 15-15-15
 REPORT NO. ~~15-009-4~~
 ANY DEVIATION IS NOTED
 WITH THESE DETAILS
 TEST SPECIMEN COMPLIES
 MT GROUP


SYSTEM MODEL: WS 75
CAD FILE : WS-75 cat.dwg
SCALE : 1:1
VER - DATE: 2 - May/08/14
PAGE : 75-13-56

CORNER DRIVE

904019

Functions

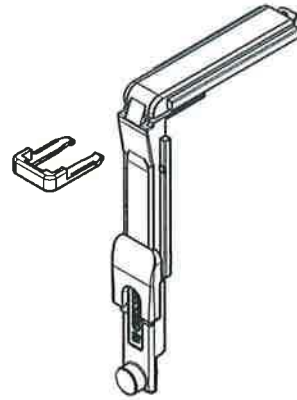
Element for transmission of movement of the hardware on the cremonese side to the upper and/or lower cross beam.

Finish

Base finish

Packaging

Box of 10 pieces



Technical Features

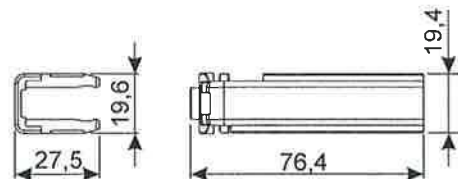
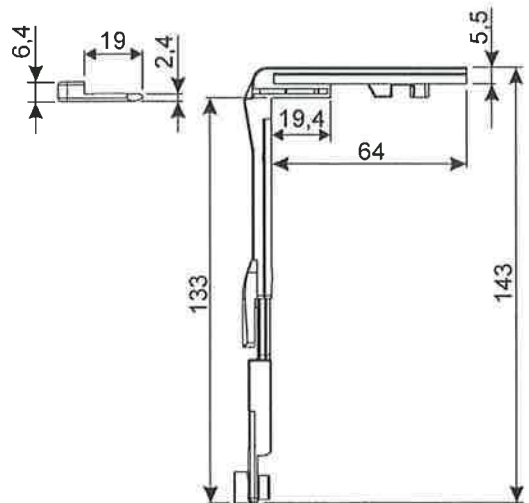
Left/right reversible and equipped with a fixed pawl for creating a lock point in combination with the adjustable striker, on the cremonese side or cross beam side, depending on how the drive is to be positioned.

It is secured using a hooking clip enabling quick and easy fixing without having to machine the profile and without screws.

It snaps on and is removed using a screwdriver.

Materials

SILVER PLUS GS Zamak body and clip
Stainless steel plates



MT GROUP

TEST SPECIMEN COMPLIES

WITH THESE DETAILS

ANY DEVIATION IS NOTED

REPORT NO. 15-009-B

TEST DATE: 4-15-15

SYSTEM MODEL: **DS 75**

CAD FILE: **DS-75 cat.dwg**

SCALE: **1:1**

VER - DATE: **2 - May/08/14**

PAGE: **75-60-27**

REX CORNER JOINT
900353
Functions

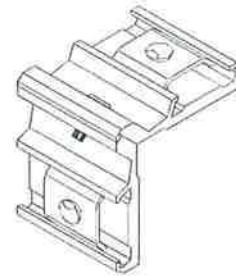
Snap-fit joining element for corner connection of aluminium profiles.

Finish

Base finish

Packaging

Box of 250 pieces

MT GROUP
TEST SPECIMEN COMPLIES
WITH THESE DETAILS
ANY DEVIATION IS NOTED
REPORT NO. 15-009-B
TEST DATE: 4-15-15

Technical Features

 Corner joint with external buttons $\varnothing 10$ mm.

The two spring-loaded buttons enable quick and secure assembly of the corner joints.

The closing screw ensures quick joining of the parts.

Specific for joining profiles with 45° end cut.

Materials

Extruded aluminium

Galvanised steel screw and buttons

Springs in hardened steel

Capacity/Certificated/etc(-NP-)

Capacity description Capacity description Capacity description

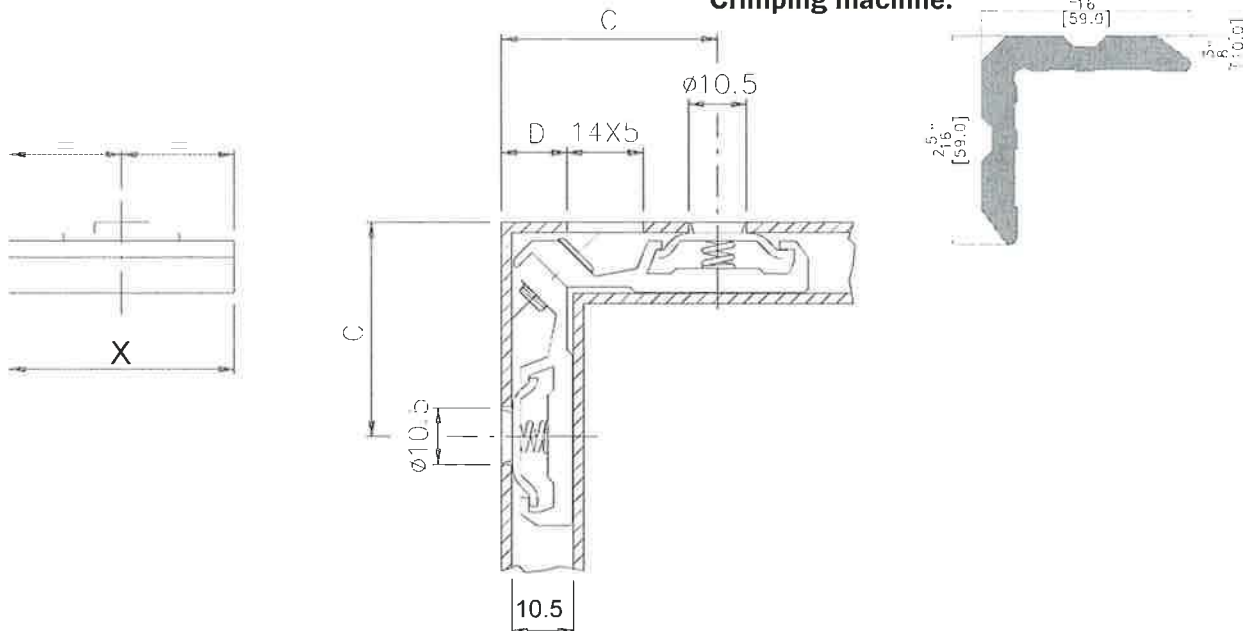
Profile	Corner Cleat	Extruded*	X (mm)	h (mm)
753601	900353	900002	19.5	10
753603	900353	900002	19.5	10
753604	900353	900002	19.5	10
754504	900353	900002	19.5	10

* 900002 is an extruded profile.

Can be cut to any required width,

but must be connected with a

Crimping machine.


SYSTEM MODEL: DS 75
CAD FILE: DS-75 cat.dwg
SCALE: 1:1
VER - DATE: 2 - Jul/24/14
PAGE: 75-60-28

KAMEL CORNER JOINT
9003XX
Functions

Clip-on corner joint for aluminium profile sections.

Finish

Natural

Packaging

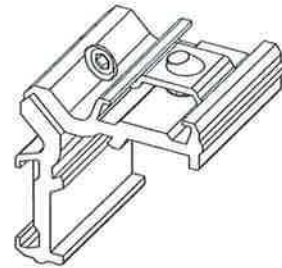
Box of 100 pieces

MT GROUP

 TEST SPECIMEN COMPLIES
WITH THESE DETAILS

ANY DEVIATION IS NOTED

 REPORT NO. 15-908-B

 TEST DATE: 4-18-15

Technical Features

Corner joint with external buttons (Ø10 mm).

The two buttons are fitted with a spring for rapid and secure joint assembly.

The lock screw facilitates rapid joining of the parts to be assembled.

Specifically designed to join 45° angle profile sections.

Parts

M5x13.5 oval-headed screw

Materials

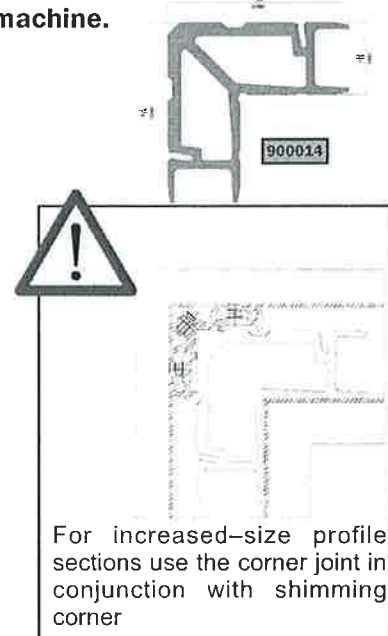
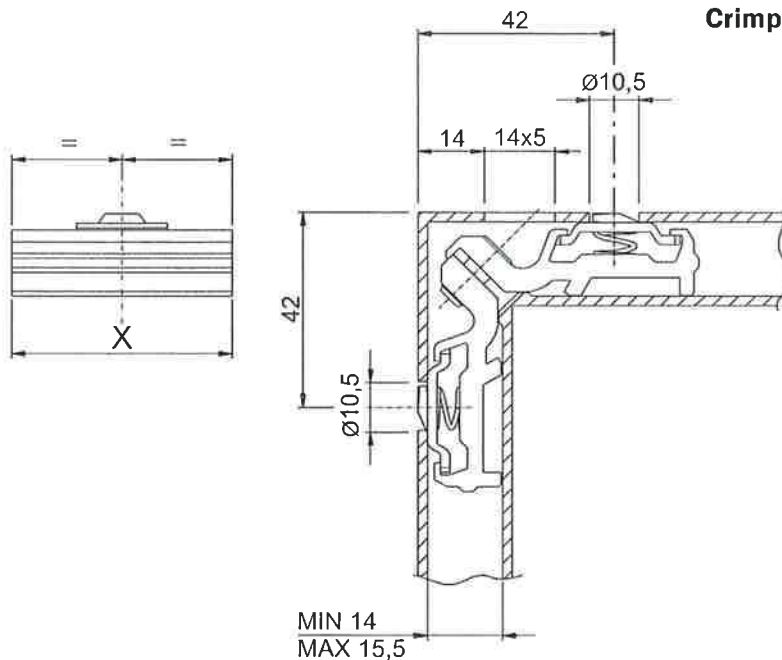
Extruded aluminium

Galvanised steel screw and buttons.

Tempered steel springs.

Profile	Corner Cleat	Extruded*	X (mm)	h (mm)
758701	900341	900006	36	14
751081	900341	900006	36	14
Need to add corners 900014				

* 900006/14 are extruded profiles.
Can be cut to any required width,
but must be connected with a
Crimping machine.


SYSTEM MODEL: DS 75
CAD FILE: DS-75 cat.dwg
SCALE: 1:1
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PAGE: 75-60-29

MT GROUP
 TEST SPECIMEN COMPLIES
 WITH THESE DETAILS
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 REPORT NO. 15-009-B
 TEST DATE: 14-15-15



910001 Center Gasket

912005 Rebate Gasket



912003 Rebate Gasket



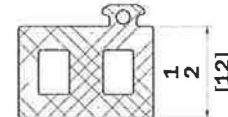
912006 Gap Gasket



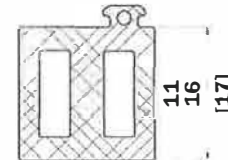
911114 Joint Gasket



911812 Adapter Gasket



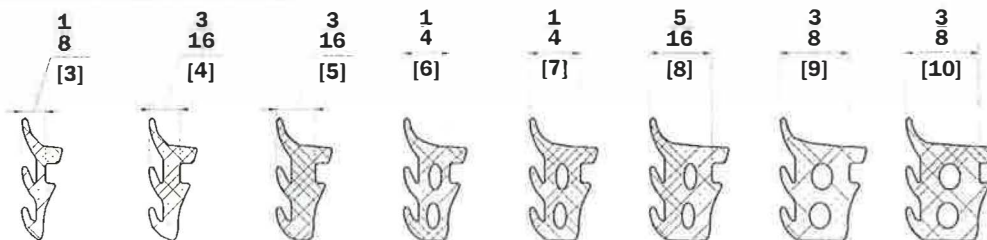
911817 Adapter Gasket



911025 Outer Glazing Gasket 2.5mm



Inner Glazing Gasket



913030 913040 913050 913060 913070 913080 913090 913100

ADJUSTABLE SINGLE STRIKER
901347
Functions

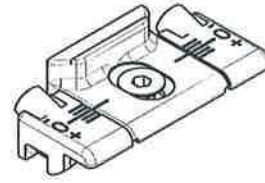
Element that works with the connection joints and the pawls present on bolt tips, corner drives, connection devices, cremone drivers and connection rods, with the function of locking point.

Finish

Base finish

Packaging

Box of 200 pieces


Technical Features

The closing function is carried out by means of the central element that works with the pawl during the closing phase of the hardware. This element is adjustable +/- 1,8 mm, by turning the provided screw; the securing on the frame is carried out by means of the two pre-assembled grub-screws.

Materials

GS SILVER PLUS Zamak striker

Steel screws and grub screws

MT GROUP

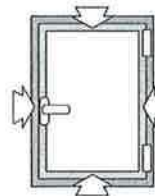
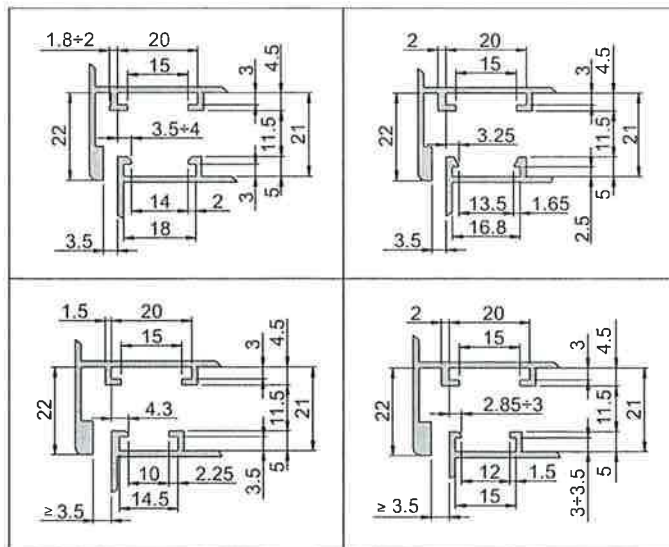
TEST SPECIMEN COMPLIES

WITH THESE DETAILS

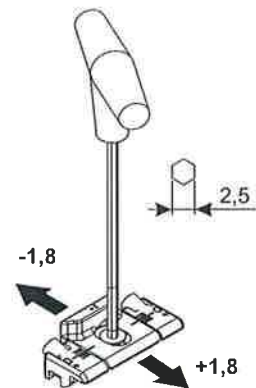
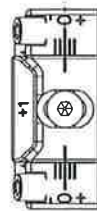
ANY DEVIATION IS NOTED

REPORT NO. 15-009-B

TEST DATE: 4-15-15



±1,8



SYSTEM MODEL: **DS 75**

CAD FILE: **DS-75 cat.dwg**

SCALE: **1:1**

VER - DATE: **1 - May/08/14**

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FIXED CONNECTING JOINT MX-MX
904047
Functions

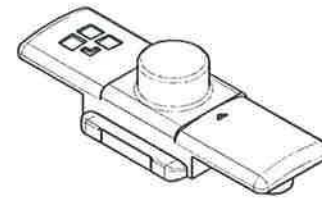
Fixed connection joint, to be coupled to the adjustable striker, necessary to create a locking point.

Finish

Base finish

Packaging

Box of 200 pieces

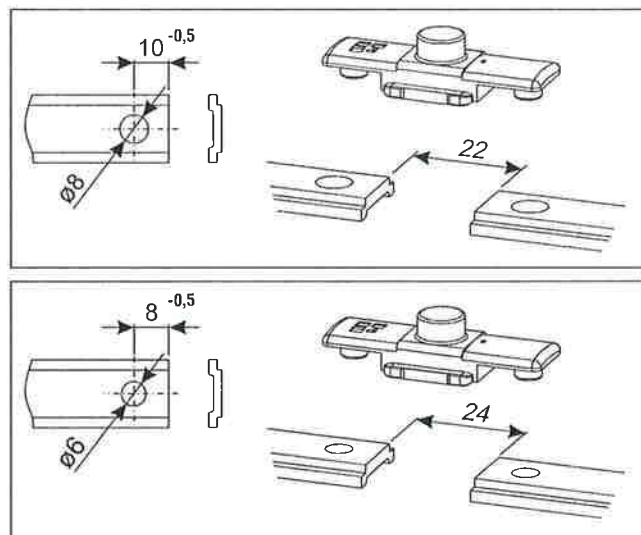
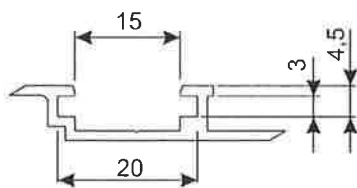
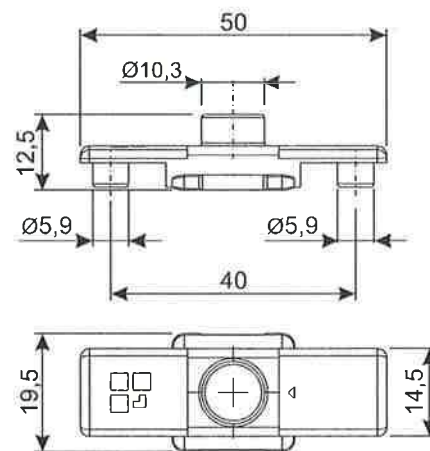

Technical Features

The connection joint can be fitted at the end of a connection rod or to couple two connection rods. In both cases, coupled to an adjustable striker, it creates a locking point.

Materials

SILVER PLUS GS zamak connecting element

MT GROUP
 TEST SPECIMEN COMPLIES
 WITH THESE DETAILS
 ANY DEVIATION IS NOTED
 REPORT NO. 15-009-B
 TEST DATE: 4-15-15


SYSTEM MODEL: DS 75
CAD FILE: DS-75 cat.dwg
SCALE: 1:1
VER - DATE: 2 - May/08/14
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