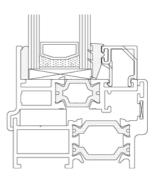


evolution

WINDOWS



Smart Architectural Aluminium

Evolution Technical Manual

January 2009

For further information visit www.smartsystems.co.uk

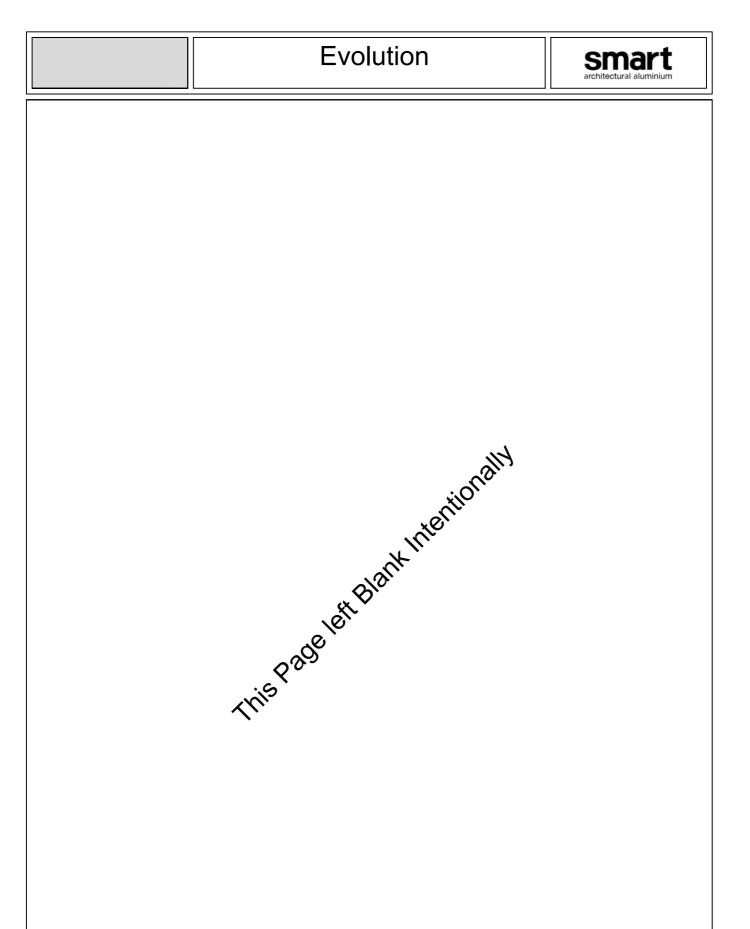
© Smart Systems Ltd 2009





Main Index

| - Index | Index Blank | Page 01 Page 02 |
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| CW | Sections Scaled Elevations | Page 29 to 50 |
| D W | Statics Details Not Yet Available | Page 51 to 52 |
| EW | Construction Drawings Index 1 - Corner Jointing 2 - Transom/Mullion Fixings 3 - Friction Stays / Hinges 4 - Locking Hardware 5 - Bead & Glazing 6 - Drainage | Page 53 to 54 Page 55 to 57 Page 58 to 61 Page 62 to 63 Page 64 to 70 Page 71 Page 72 |
| F W | Sawing Tables 1 - Fixed Light Outer Frame 2 - Vent Frame Casement Open Out with W20020 3 - Window Vent 1 Fixed Panel 4 - Window 2 Vents 1 Fixed 5 - Window Vent with 1 fixed Panel 6 - Opening Vent Above Reverse Adaptor | Page 73 Page 74 Page 75 Page 76 Page 77 Page 78 Page 79 |
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Section 'A'

PROFILES

Drawing Number: aW-01-00

| Number | Picture | Page | Perim. mm | Mec. | lxx cm4 | lyy cm4 | Length | Pack pr. | MF | SA | KL | НР | М |
|--------|-----------------|------|--------------|------|------------|------------|--------|----------|----|----|----|----|---|
| ETC157 | A B | 10 | 391 | 131 | | 1 | 6.5 | 1 | X | X | X | x | X |
| ETC158 | А | 10 | 513 | 205 | | | 6.5 | 1 | Х | Х | Х | Х | Х |
| ETC178 | А | 10 | 305 | 128 | | - | 6.5 | 1 | Х | Х | Х | Х | Х |
| ETC179 | A B | 10 | 626 | 240 | | - | 6.5 | 1 | X | X | X | Х | X |
| ETC517 | A B X Y X Y | 9 | 240 | 162 | 39.6 | 5.3 | 6.5 | 1 | X | X | X | x | X |
| W20010 | A B X Y X | 6 | 255.6 | 66 | 9.1 | 1.6 | 6.5 | 1 | Х | X | Х | X | X |
| W20012 | A B X Y Y Y Y X | 6 | 255.9 | 68.2 | 9 | 1.5 | 6.5 | 1 | Х | X | Х | X | X |
| W20013 | АВ | 6 | 305 | 78 | 11.5 | 3 | 6.5 | 1 | X | X | X | x | X |
| W20020 | A B X Y X Y | 7 | 253 | 78 | 8.5 | 1.6 | 6.5 | 1 | Х | х | Х | х | Х |

MF = Mill Finish
SA = Silver Anodised
KL = Basic Colour

GOZ = Gold
W = White
Z = Black

A = Outside B = Inside

HP = Special Colour
M = Dual Colour

Evolution



Drawing Number: aW-02-00

PROFILES

| Number | Picture | Page | Perim. | Mec. mm | lxx cm4 | lyy cm4 | Length | Pack pr. | MF | SA | KL | НР | М |
|--------|---------------|------|--------|------------|------------|------------|--------|----------|----|----|----|----|---|
| W20021 | A X Y X Y | 7 | 222.2 | 44.3 | 4.9 | 0.8 | 6.5 | 1 | X | x | X | x | х |
| W20030 | A S B X Y X Y | 8 | 259.6 | 63.3 | 8.1 | 1.5 | 6.5 | 1 | Х | х | Х | х | Х |
| W20031 | A S B Y X Y | 8 | 258.2 | 83.7 | 11.5 | 2.8 | 6.5 | 1 | X | X | X | x | x |
| W20041 | A B X Y Y Y | 10 | 233.4 | 60.7 | 8.5 | 1.6 | 6.5 | 1 | X | Х | X | х | х |
| W20050 | A + | 9 | 268 | 45.3 | 40.9 | 2.8 | 6.5 | 1 | X | X | X | X | х |
| W20051 | A B Y X Y | 9 | 295 | 33.6 | 53.5 | 4.7 | 6.5 | 1 | Х | Х | Х | х | х |
| W20052 | Y X Y | 9 | 109.8 | 0 | 3.17 | 0.25 | 6.5 | 1 | X | | | | |
| W20164 | 77 | 14 | 102.19 | 26.8 | | | 4 | 1 | X | Х | X | X | |
| W20165 | АВ | 14 | 67.83 | 31.9 | | | 4 | 1 | X | Х | X | Х | |

A = Outside B = Inside

GOZ= Gold W = White Z = Black

MF = Mill Finish SA = Silver Anodised KL = Basic Colour HP = Special Colour

M = Dual Colour



Section 'A'

PROFILES

Drawing Number: aW-03-00

| Number | Picture | Page | Perim. mm | Mec. | lxx cm4 | lyy cm4 | Length | Pack pr. | MF | SA | KL | НР | М |
|--------|---|------|--------------|------|------------|------------|--------|----------|----|----|----|----|---|
| W20166 | АВ | 14 | 99.8 | 47.9 | | | 4 | 1 | Х | x | X | X | |
| W20481 | $\begin{array}{c} A \\ \\ \\ \\ \\ \\ \\ \\ \\ \end{array}$ | 11 | 142.1 | 69.8 | 4.3 | 0.1 | 6.5 | 1 | Х | х | Х | Х | |
| W20482 | A V X Y | 11 | 252.4 | 91.5 | 20.5 | 0.5 | 6.5 | 1 | X | х | X | Х | x |
| W20483 | A B Y X Y X | 11 | 252.4 | 66 | 16.9 | 0.3 | 6.5 | 1 | Х | Х | Х | Х | х |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

MF = Mill Finish SA = Silver Anodised KL = Basic Colour

GOZ= Gold W = White Z = Black

HP = Special Colour
M = Dual Colour

A = Outside B = Inside

Primary Visible Side

Evolution



Drawing Number: aW-04-00 Outer Frame Profiles

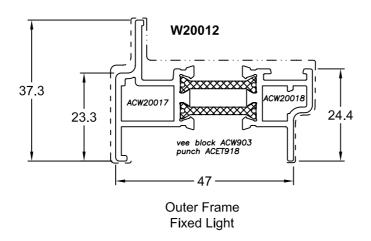
W20010

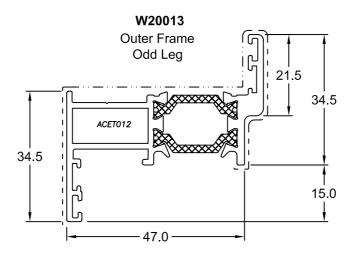
21.5

34.5

Outer Frame

Secondary Visible Side



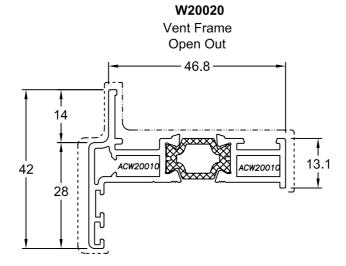


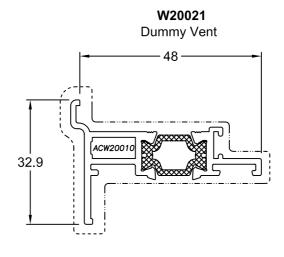


Section 'A'

Profiles Vents Drawing Number: aW-05-00

Primary Visible Side ----- Secondary Visible Side -----



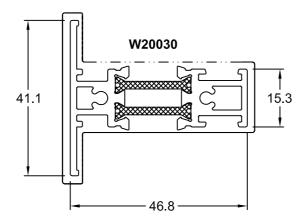


Evolution

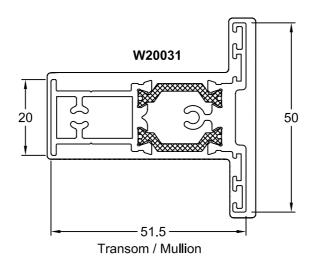


Drawing Number: aW-06-00 Transom/Mullion Profiles

Primary Visible Side ------ Secondary Visible Side --------



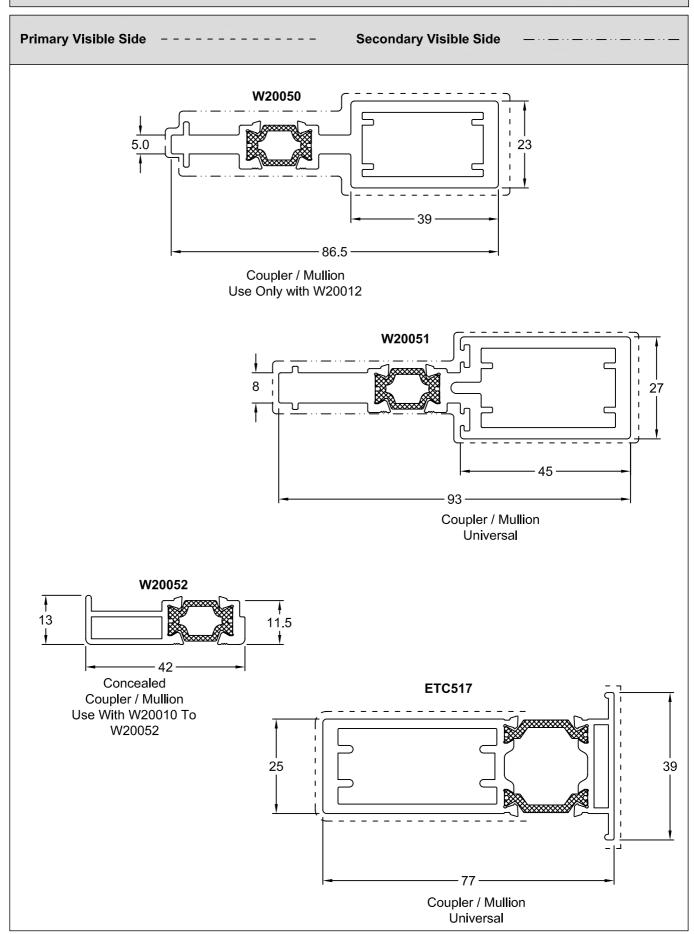
Dummy Transom / Mullion





Section 'A'

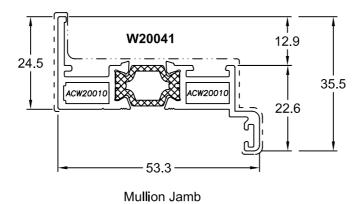
Profiles Couplers Drawing Number: aW-07-00



Evolution



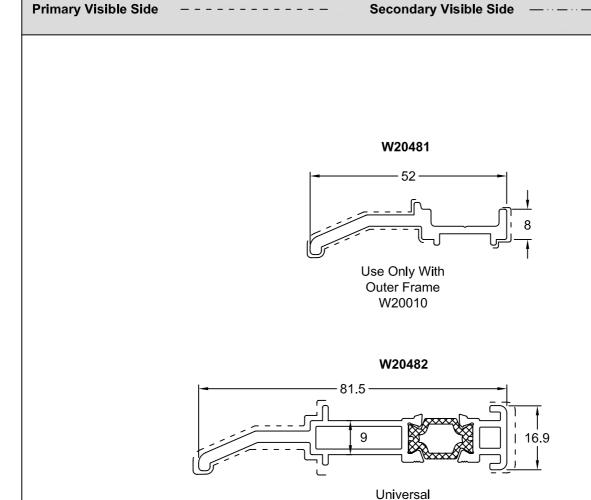
Drawing Number: aW200-08-00 French Casement Vents Profiles

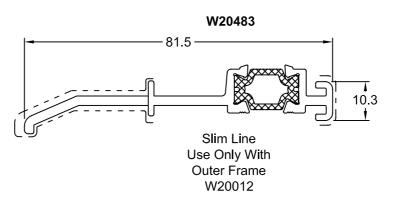




Section 'A'

Profiles Drips Drawing Number: aW-09-00

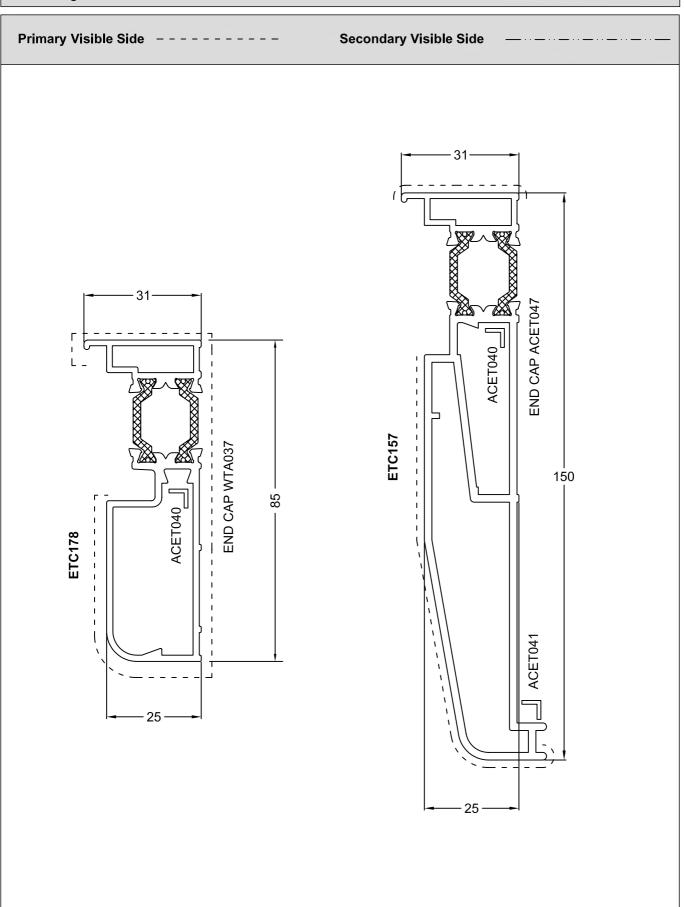




Evolution



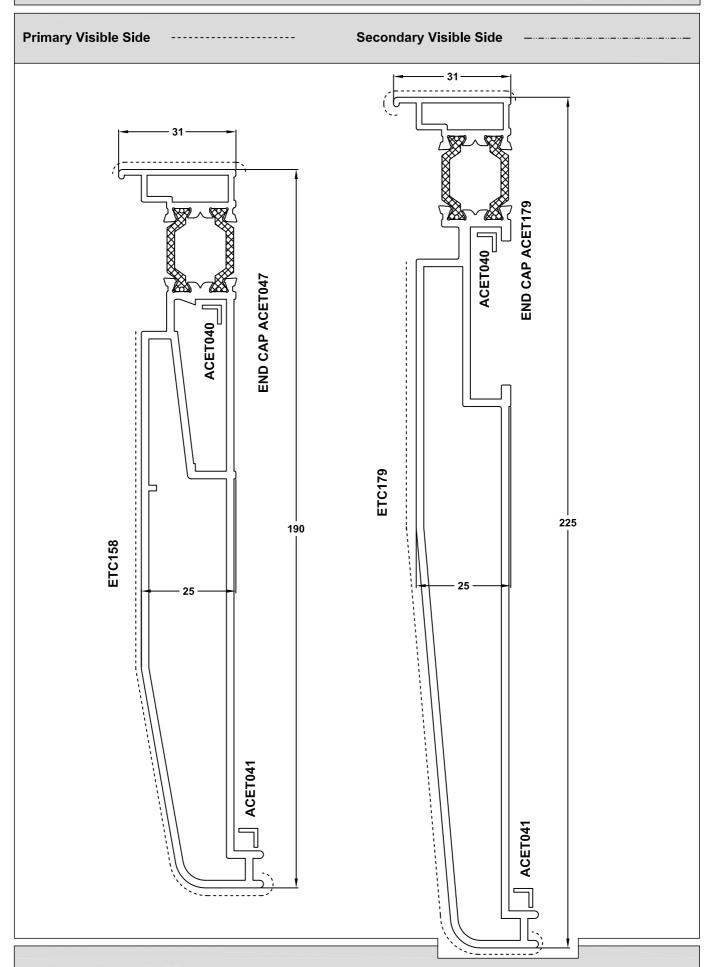
Drawing Number: aW-10-00 Cills Profiles



Evolution



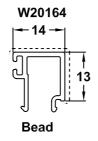
Profiles Cills Drawing Number: aW-11-00

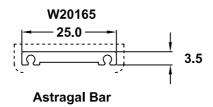


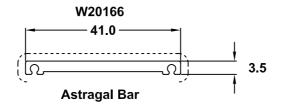
Evolution



Drawing Number: aW-12-00 Bead/Astragal Bar Profiles









Section 'B'

Accessories

Drawing Number: bACW-01-00

| Accessories Index | | | | | | | | | | |
|--|------|-----------|------|---|------|--|--|--|--|--|
| Accessory | Page | Accessory | Page | Accessory | Page | | | | | |
| ACET012 ACET040 ACET041 ACET045 ACET066 | 16 | | | ACW20042 ACW20043 ACW20044 ACW20045 ACW20046 | 23 | | | | | |
| ACET080 ACET082 ACET093 ACET131 ACET165 | 17 | | | ACMX09700 ACMX09761 ACMX09762 ACMX09763 ACMX09764 | 24 | | | | | |
| ACET904 ACET918 ACRV032 ACW901 ACW902 | 18 | | | ACMX09765 ACMX09770 ACMX09775 ACMX09801 ACMX09802 | 25 | | | | | |
| ACW903 ACW20010 ACW20012 ACW20013 ACW20014 | 19 | | | ACMX09803 ACMX09830 ACSIL04 ACSIL08 ACSIL013 | 26 | | | | | |
| ACW20015 ACW20016 ACW20017 ACW20018 | 20 | | | ACSIL014 WCA133 | 27 | | | | | |
| ACW20019 ACW20020 ACW20021 ACW20022 ACVL032 | 21 | | | Left Blank | 28 | | | | | |
| ACW20034 ACW20050A Wagner Gearing Assembly ACW20040 ACW20041 | 22 | | | | | | | | | |

Evolution



Drawing Number: bACW-02-00 Accessories

| Image | Part Code | Pack | Unit | Application | Colour |
|--|--|------------------------|------|--------------------------------------|-------------------------|
| X = 9mm Y = 20mm | ACET012 Corner Cleat | 24 | Pack | W20010 | MF X SA KL HP M GOZ W Z |
| | ACET040 Cleat for Variable Angled Cill Joint | 10 | Pack | ETC157 ETC158 ETC178 ETC179 | MF X SA KL HP M GOZ W Z |
| | ACET041 Nose Bracket for Angled Cill Joint | 100 | Pack | | MF X SA KL HP M GOZ W Z |
| | ACET045 Chevron | 100 | Pack | W20010 W20020 | MF X SA KL HP M GOZ W Z |
| A planting of the second of th | ACET066 No 7 x 1 1/2" csk s/steel s/tapping screw | 100 | Pack | | MF SA KL HP GOZ W Z |
| T.BARS ACVG85=2.5mm ACVG86=3.0mm ACVL150=4.0mm Page 16 | | Gold Black White | Re | elease Date:- Jan | nuary 2009 |



Accessories

Drawing Number: bACW-03-00

| Image | Part Code | Pack | Unit | Application | Colour |
|--|---|------------------------|---------------------------|-------------|-----------------------------|
| | ACET080 Cockspur Handles | 5 | Pack | W20020 | MF |
| | ACET082 Cadenza - Espagnolette Handle Fork Driven | 5 | Pack | W20020 | MF SA KL HP M GOZ X W X Z X |
| | ACET093 Packer | 25 | Pack | W20010 | MF X SA KL HP M GOZ W Z |
| | ACET131 Drain cap | 100 | Pack | | MF SA KL HP M GOZ W X Z X |
| | ACET165 Bombardier 7mm Square, 9mm Length Spindle Espagnolette Handle | 1 50 | Each Pack Each Hand | W20020 | MF SA X KL HP M GOZ W X Z X |
| T-BARS ACVIG68-2.5mm ACVIG68-3.0mm ACVI.150-4.0mm Release Date:- January 2009 | | Gold Black White | X | F | Page 17 |



Drawing Number: bACW-04-00

Accessories

| Image | Part Code | Pack | Unit | Application | Colour |
|---|---------------------|------------------------|--------|--------------------------------------|-------------------------|
| | ACET904 Punches | 1 | Each | W20010 W20011 | MF SA KL HP M GOZ W Z |
| | ACET918 Punches | 1 | Each | W20020 W20040 W20041 | MF X SA KL HP M GOZ W Z |
| Actual Size | ACRV032 Gasket | 50 | Metres | W20051 | MF SA KL HP GOZ W Z |
| Largo | ACW901 Vee Block | 1 | Each | W20010 | MF X SA KL HP M GOZ W Z |
| R. C. War See | ACW902 Vee Block | 1 | Each | W20020 W20021 W20040 W20041 | MF X SA KL HP M GOZ W Z |
| T-BARS ACVG58-32.6mm ACVL150-4.0mm Page 18 | | Gold Black White | Re | elease Date:- Jar | nuary 2009 |



Section 'B'

Accessories

Drawing Number: bACW-05-00

Accessories

| Image | Part Code | Pack | Unit | Application | Colour |
|----------------------------------|--|-----------|------|----------------------------|-----------------------------------|
| Across Contraction of the second | ACW903 Vee Block | 1 | Each | W20012 | MF X SA KL HP M GOZ W Z |
| X=15mm Y=27mm | ACW20010 Corner Cleat | 100 | Pack | W20020 W20040 W20041 | MF X SA KL HP M GOZ W Z |
| | ACW20012 Hinge Plate | 1 | Each | W20011 | MF X SA KL HP M GOZ W Z |
| Image not Available | ACW20013 Corner Cleat | | _ | W20011 | MF X SA KL HP M GOZ W Z |
| | ACW20014 Fixing Block Cadenza Handle (ACET082) & Espagnolette Rod | 1 | Each | ACET082 | MF X SA X KL X HP X M GOZ W X Z X |
| | MF = Mi ll Finish G | OZ = Gold | | T-BARS ACVG65=2.5mm | 50 |



| HP

SA = Silver Anodised

KL = Basic Colour

HP = Special Colour M = Dual Colour GOZ = Gold W = Black Z = White



T-BARS ACVG65=2.5mm ACVG66=3.0mm ACVL150=4.0mm



Release Date:- January 2009

Page 19



Drawing Number: bACW-06-00

Accessories

Accessories

| | 7 10000001100 | | | | |
|---|---|---------------|------|-------------|-----------------------------------|
| lmage | Part Code | Pack | Unit | Application | Colour |
| | ACW20015 Fixing Block Cockspur Handle (ACET080) | 1 | Each | ACET080 | MF X SA X KL X HP X M GOZ W X Z X |
| | ACW20016 Internal End Cap | 10 Pairs | Pack | W20041 | MF |
| X=15mm Y=31mm | ACW20017 Corner Cleat | 24 | Pack | W20012 | MF X SA KL HP M GOZ W Z |
| X=15mm Y=31mm | ACW20018 Corner Cleat | 24 | Pack | W20012 | MF X SA KL HP M GOZ W Z |
| | | | | | MF SA KL HP M GOZ W Z |
| T-BARS ACVG65=2.5mm ACVG68=3.0mm ACVL150=4.0mm | SA - Silvei Allouiseu | Gold Black | X | | |

KL = Basic Colour

Page 20

HP = Special Colour M = Dual Colour Ζ

= White

Release Date:- January 2009



Section 'B'

Page 21

Accessories

Drawing Number: bACW-07-00

Accessories

| Image | Part Code | Pack | Unit | Application | Colour |
|---|---|------------------------|--------|----------------------------|-----------------------------------|
| | ACW20019 Espagnolette Lock Keep Cadenza Handle + Espagnolette Rod, Fork Driven - (Pat 058) Wagner | 1 | Each | W20010 | MF SA KL HP M GOZ W Z |
| | ACW20020 Cockspur Handle Wedge | 100 | Pack | W20041 W20020 | MF SA KL HP GOZ W X Z X |
| | ACW20021 Fixing - Espagnolette Spindle Driven ACET165 | 1 | Each | | MF X SA X KL X HP X M GOZ W X Z X |
| | ACW20022 Fixing - Dummy Block | 1 | Each | | MF X SA X KL X HP X M GOZ W X Z X |
| | ACVL032 Vent Seal | 200 | Metres | W20010 W20040 W20041 | MF SA KL HP M GOZ W Z |
| T-BARS ACVG65=2,5mm ACVG66=3,0mm ACVL150=4.0mm | | Gold Black White | X | | |

HP = Special Colour M = Dual Colour

Release Date:- January 2009



Drawing Number: bACW-08-00

Accessories

| l | D 40 L | | | A | |
|---|--|------------------------|--------|------------------|---------------------------|
| lmage | Part Code | Pack | Unit | Application | Colour |
| | ACW20034 E Gasket 4mm Wedge | 200 | Metres | W20020 W20041 | MF SA KL HP M GOZ W Z |
| | ACW20050A External Double Vent Moulding | 10 Pairs | Pack | W20020 W20041 | MF SA KL HP M GOZ W X Z X |
| | Fork Driven Espaqnolette by Wagner (phone No 01675466411) Use ACW20046 Keeps | | | | MF X SA KL HP M GOZ W Z |
| | ACW20040 250mm Espag Rod 2 Cams Per Rod | 10 | Pack | W20020 | MF X SA KL HP M GOZ W Z |
| | ACW20041 400mm Espag Rod 2 Cams Per Rod | 10 | Pack | W20020 | MF X SA KL HP M GOZ W Z |
| T-BARS ACVG68-2.5mm ACVG68-3.0mm ACVL150-4.0mm Page 22 | | Gold Black White | Re | elease Date:- Ja | nuary 2009 |



Section 'B'

Accessories

Drawing Number: bACW-09-00

Accessories

| 71000001100 | | | | | | |
|---|---|------------------------|------|-------------|-------------------------|--|
| Image | Part Code | Pack | Unit | Application | Colour | |
| | ACW20042 600mm Espag Rod 2 Cams Per Rod | 10 | Pack | W20020 | MF X SA KL HP M GOZ W Z | |
| | ACW20043 800mm Espag Rod 2 Cams Per Rod | 10 | Pack | W20020 | MF X SA KL HP M GOZ W Z | |
| | ACW20044 1000mm Espag Rod 3 Cams Per Rod | 10 | Pack | W20020 | MF X SA KL HP M GOZ W Z | |
| | ACW20045 1200mm Espag Rod 3 Cams Per Rod | 10 | Pack | W20020 | MF X SA KL HP M GOZ W Z | |
| | ACW20046 Espag Keep-Use with ACW20040 to ACW20045 | 10 | Pack | W20020 | MF X SA KL HP M GOZ W Z | |
| T-BARS ACVG65-2.5mm ACVG68-3.0mm ACVL150-4.0mm | | Gold Black White | X | | | |

KL = Basic Colour

Release Date:- January 2009

HP = Special Colour M = Dual Colour = White

Page 23

Ζ



Drawing Number: bACW-10-00

Accessories

Accessories

| Image | Part Code | Pack | Unit | Application | Colour |
|---|-------------------------|------|------|---------------|-----------------------|
| COMPANIE OF THE PARTY OF THE PA | ACMX09700 Alu Polish | 1 | Each | All Aluminium | MF SA KL HP M GOZ W Z |
| MAKI-COOKING THE PROPERTY OF | ACMX09761 Maxi-Gloss | 1 | Each | | MF SA KL HP M GOZ W Z |
| TRIOGER WILLIAM THE PROPERTY OF THE PROPERTY | ACMX09762 Alu Bright | 1 | Each | | MF SA KL HP GOZ W Z |
| CRO PRY LUBE at the Market Landan was to the Committee of | ACMX09763 Teflon Spray | 1 | Each | | MF SA KL HP GOZ W Z |
| TANK - CEANED The Area of a second and the control of the control | ACMX09764 Maxi-Clean | 1 | Each | | MF SA KL HP GOZ W Z |
| T-BARS ACVG65-2.5mm | MF = Mill Finish GOZ = | Gold | X | | |



ACVG65=2,5mm ACVG66=3.0mm ACVL150=4.0mm



Screw (Grub)

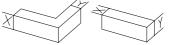
SA = Silver Anodised

KL = Basic Colour HP = Special Colour

M = Dual Colour

GOZ = Gold





Release Date:- January 2009



Section 'B'

Accessories

Drawing Number: bACW-11-00

Accessories

| 71000001100 | | | | | | |
|--|--------------------------------|------------------------|------|-------------|-----------------------|--|
| Image | Part Code | Pack | Unit | Application | Colour | |
| WE-CLEANE SEAL CONCIDENT SEXUE OF SEXUE SEXUE SEXUE OF SEXU | ACMX09765 Alu Cleaner | 1 | Each | | MF SA KL HP M GOZ W Z | |
| | ACMX09770 Roll & Wrap 100mm | 1 | Each | | MF SA KL HP M GOZ W Z | |
| | ACMX09775 Grip Handywrap | 1 | Each | | MF SA KL HP M GOZ W Z | |
| | ACMX09801 Protective Tape 50mm | 1 | Each | | MF SA KL HP M GOZ W Z | |
| | ACMX09802 Protective Tape 70mm | 1 | Each | | MF SA KL HP M GOZ W Z | |
| T-BARS ACVG65-2.5mm ACVG66-3.0mm ACVL150-4.0mm | | Gold Black White | · X | | | |

KL = Basic Colour

Release Date:- January 2009

HP = Special Colour M = Dual Colour = White

Page 25

Ζ



Drawing Number: bACW-12-00

Accessories

| lmage | Part Code | Pack | Unit | Application | Colour |
|--|---------------------------------|------------------------|------|-------------------|-------------------------|
| | ACMX09803 Protective Tape 100mm | | Each | | MF SA KL HP M GOZ W Z |
| Unionzement | ACMX09830 Gum for EPDM-Rubber | 1 | Each | | MF SA KL HP GOZ W Z |
| The state of the s | ACSIL04 GW/Z Sealing Glue | 1 | Each | | MF SA KL HP GOZ W X Z X |
| | ACSIL08 Silicone Gun | 1 | Each | | MF SA KL HP M GOZ W Z |
| | ACSIL013 Glue for Mitre | 1 | Each | | MF SA KL HP M GOZ W Z |
| T-BARS ACVG65e-3.0mm ACVL150=4.0mm Page 26 | | Gold Black White | Re | elease Date:- Jai | nuary 2009 |



Section 'B'

Accessories

Drawing Number: bACW-13-00

Accessories

| Image | Part Code | Pack | Unit | Application | Colour |
|--|--|--------|------|-------------|-----------------------|
| ARTICORD STATE OF THE PROPERTY OF THE PROPERT | ACSIL014 Anti-Corro / Protection Product | 1 | Each | | MF SA KL HP M GOZ W Z |
| The state of the s | WCA133 Pan head screw No8 x 1 3/4" | 100 | Pack | | MF SA KL HP GOZ W Z |
| | | | | | MF SA KL HP GOZ W Z |
| | | | | | MF SA KL HP M GOZ W Z |
| T-BARS | MF = Mill Finish GOZ | = Gold | | ~ /J = = | MF SA KL HP GOZ W Z |

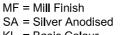




Release Date:- January 2009



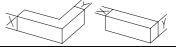
(Grub)



KL = Basic Colour HP = Special Colour M = Dual Colour









Drawing Number: bACW-14-00

Accessories

Accessories

| 710000001100 | | | | | |
|--------------|--------------------------|------|------|-------------|----------|
| lmage | Part Code | Pack | Unit | Application | Colour |
| | | | | | NAT. |
| | | | | | MF SA |
| | | | | | KL |
| | | | | | HP |
| | | | | | М |
| | | | | | GOZ |
| | | | | | W |
| | | | | | Z |
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| | | 100 | | | GOZ |
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| | , Xe | | | | |
| | | | | | MF |
| | 1 | | | | SA |
| | | | | | KL |
| | | | | | HP |
| | | | | | М |
| | | | | | GOZ |
| | | | | | W Z |
| | 200 | | | | |
| 0 | 10 3 | | | | |
| .6 | | | | | MF |
| Mis | | | | | SA KL |
| | | | | | HP |
| | | | | | М |
| | | | | | GOZ |
| | | | | | W |
| | | | | | Z |
| | | | | | |
| | | | | | MF |
| | | | | | SA |
| | | | | | KL |
| | | | | | HP |
| | | | | | M GOZ |
| | | | | | W |
| | | | | | Z |
| | | | | | |
| TRADE | ME = Mill Finish GOZ = | Gold | | ~ /4 > | |





MF = Mill Finish

SA = Silver Anodised

KL = Basic Colour HP = Special Colour GOZ = Gold W = Black

= White



Page 28

M = Dual Colour

Release Date:- January 2009



Section 'C'

Drawing Number: cW-00-00 **Sections** Sections **Sections** Window Drawing(s)

| Section | 10 |
|----------------|----|
| 36 CHOR | |



Drawing Number:cW-00a-00

Blank Page

Sections Scale 1:1 This Page Left Intentionally Blank

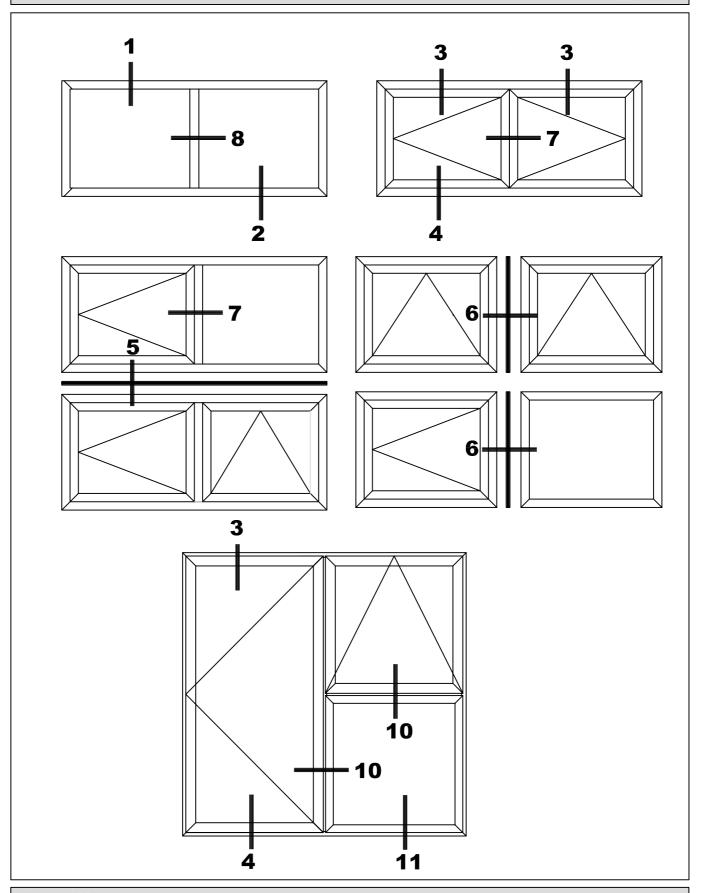


Section 'C'

Window Elevations

Drawing Number:cW-01-00

Scale 1:1 Sections ---

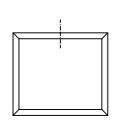


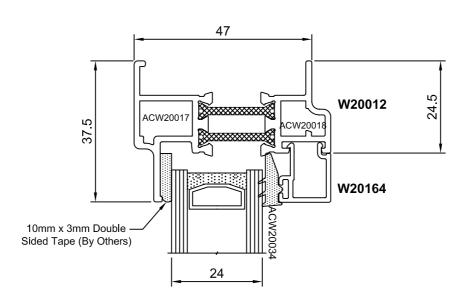


Drawing Number: cW-02-00

Fixed Light Outer Frame

1aSectionsScale 1:1





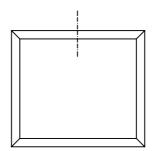
Evolution

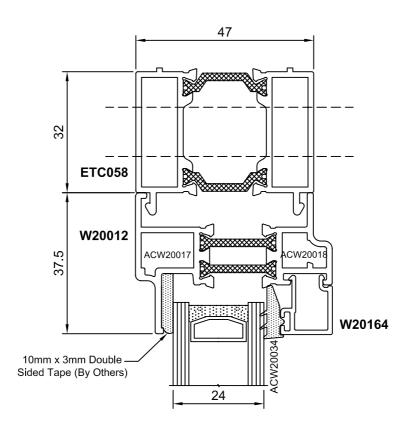


Drawing Number:cW-02a-00

Head Extension

1b Sections Scale 1:1





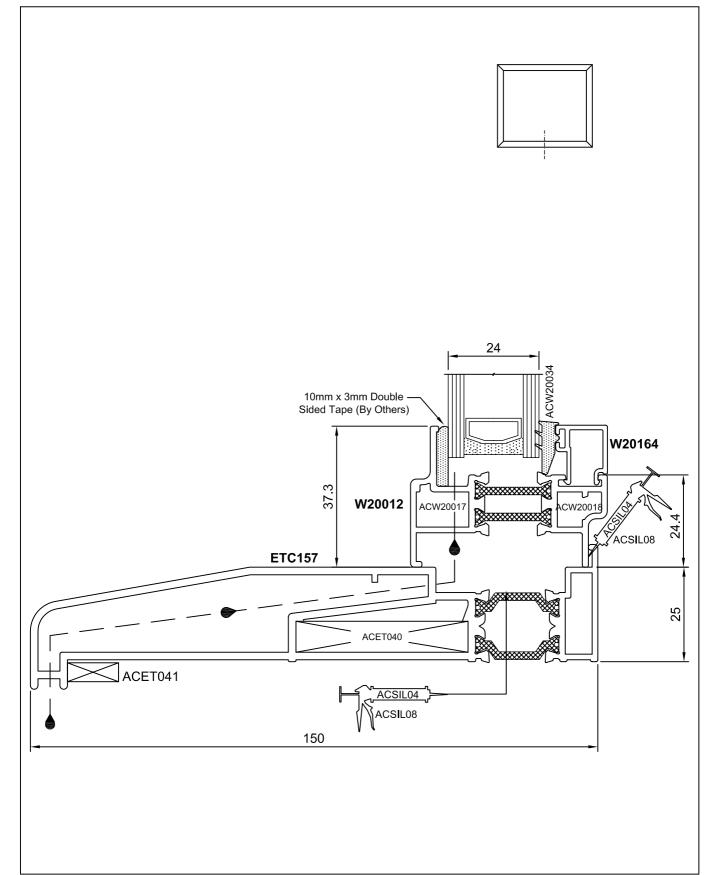


Section 'C'

Fixed Light Cill Detail

Drawing Number:cW-03-00

Scale 1:1 Sections 2a



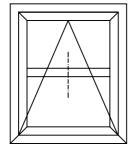
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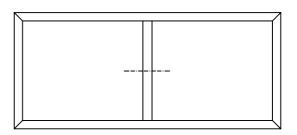


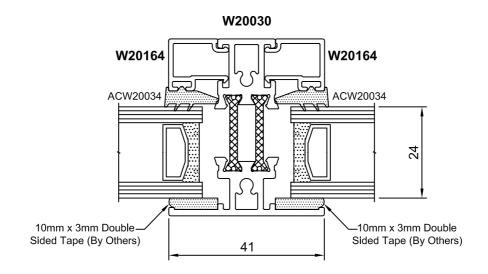
Drawing Number:cW-04-00

Vent

3a Sections Scale 1:1







Evolution



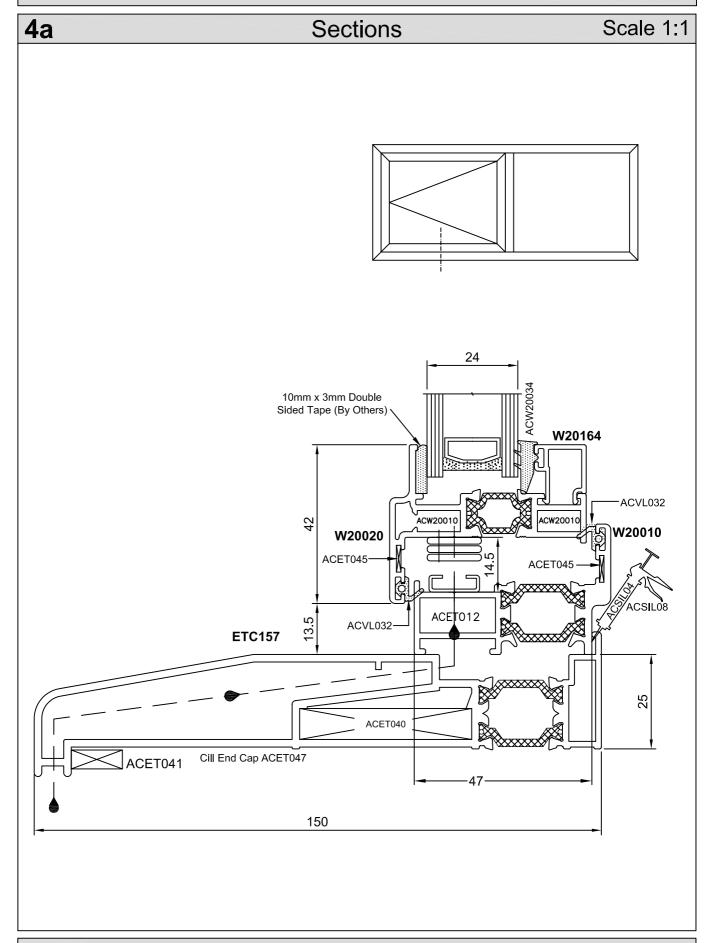
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Evolution



Drawing Number:cW-05-00

Vent





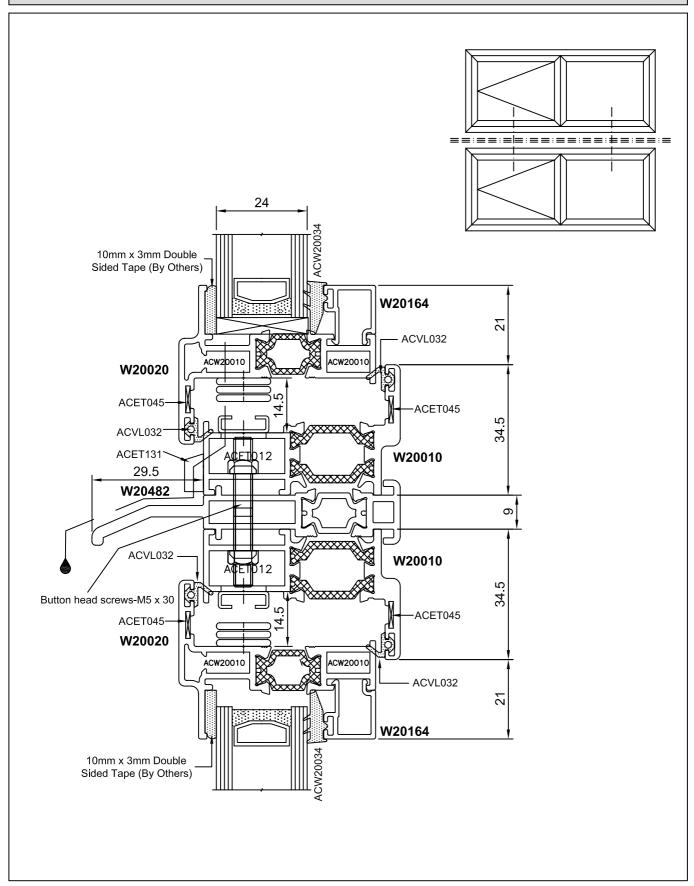
Evolution

Section 'C'

Horizontal Coupling Detail

Drawing Number: cW-06-00

Scale 1:1 Sections 5a

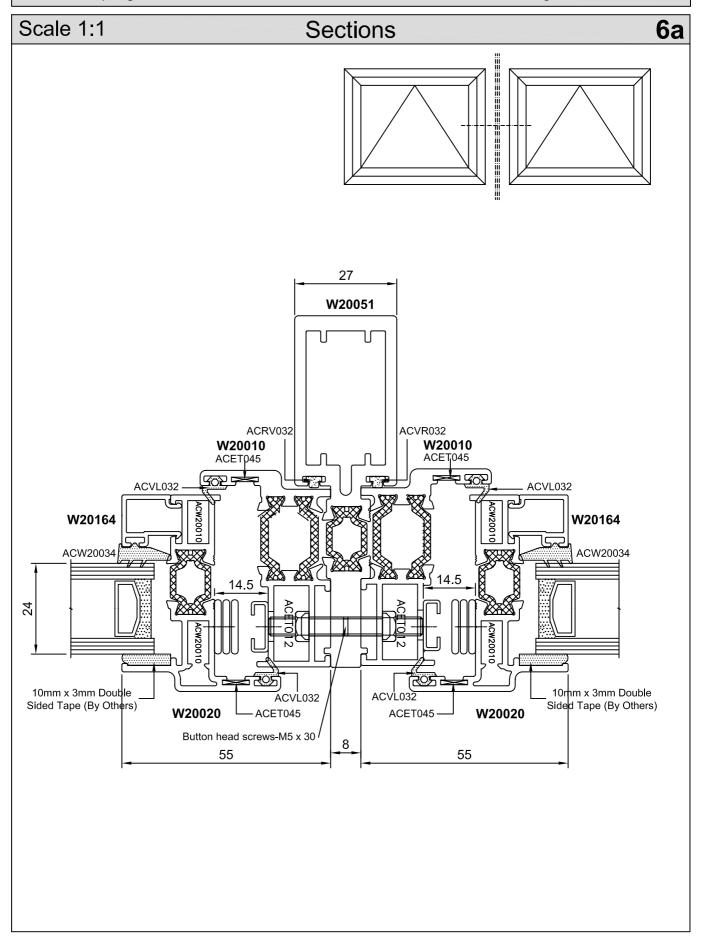


Evolution



Vertical Coupling Detail

Drawing Number:cW-07-00



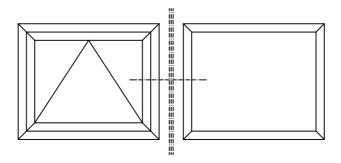
Evolution

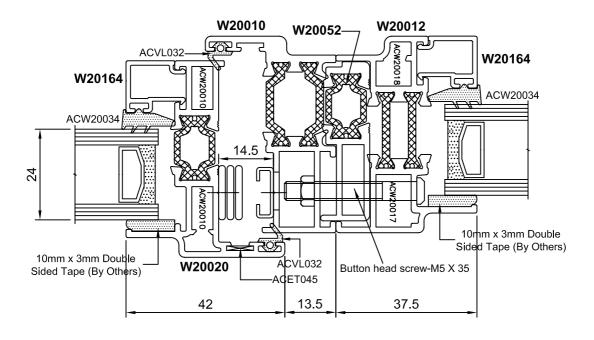


Drawing Number:cW-08-00

Vertical Coupling Mullion

6b Sections Scale 1:1



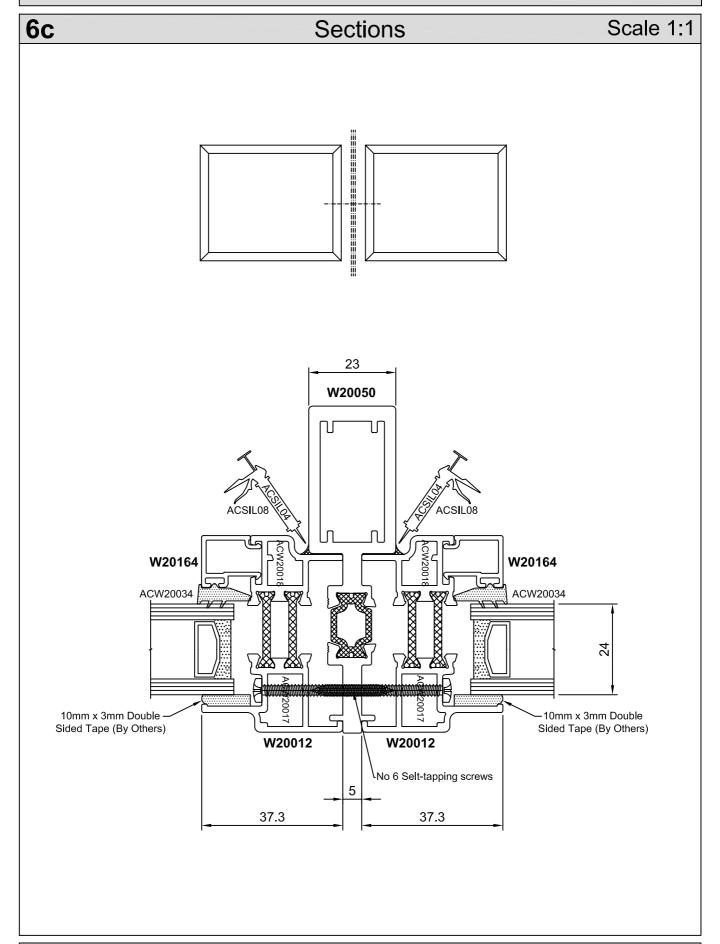


Evolution



Drawing Number:cW-09-00

Vertical Coupling Mullion



Evolution



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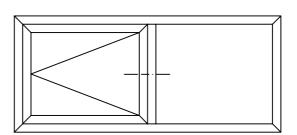


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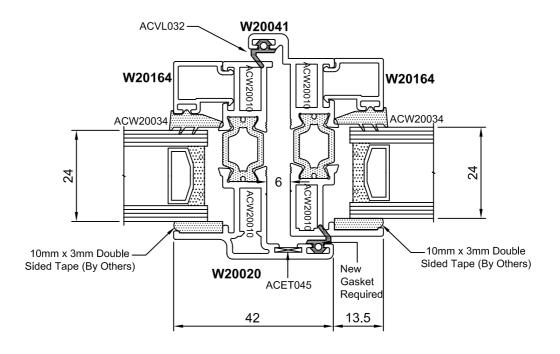
Section 'C'

Mullion Drawing Number: cW-10-00

7a Sections Scale 1:1



This detail is suitable for cockspur handles only



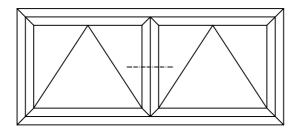
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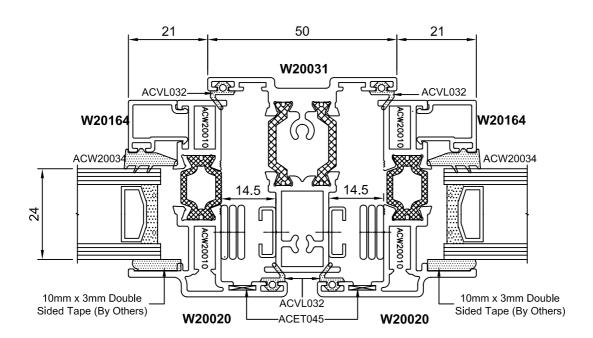


Drawing Number:cW-11-00

Mullion

7b Sections Scale 1:1



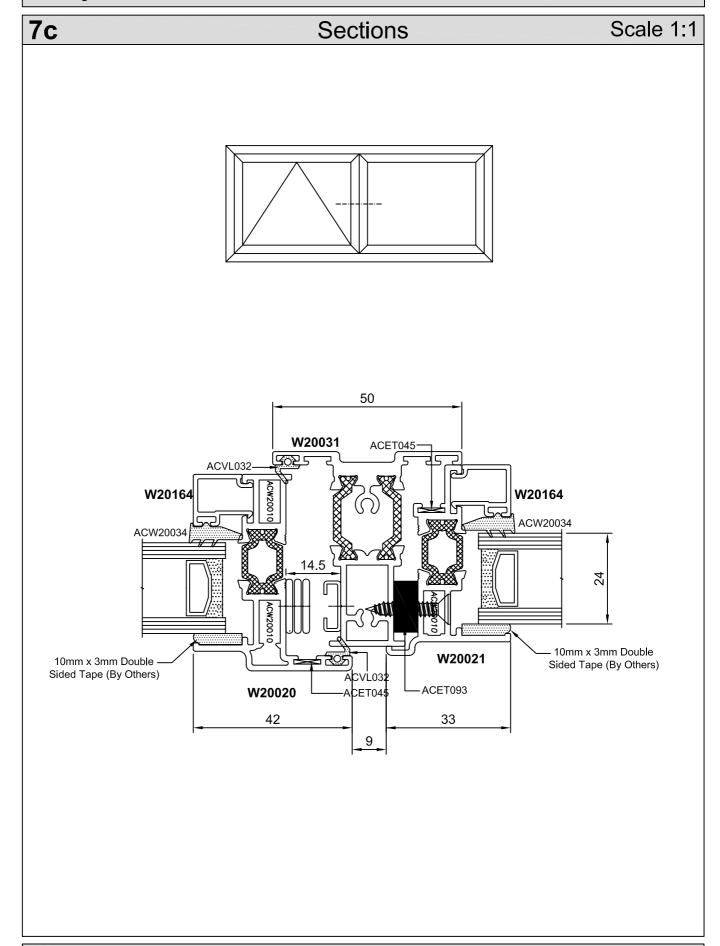


Evolution



Drawing Number:cW-12-00

Mullion



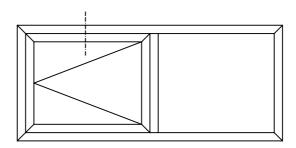
Evolution

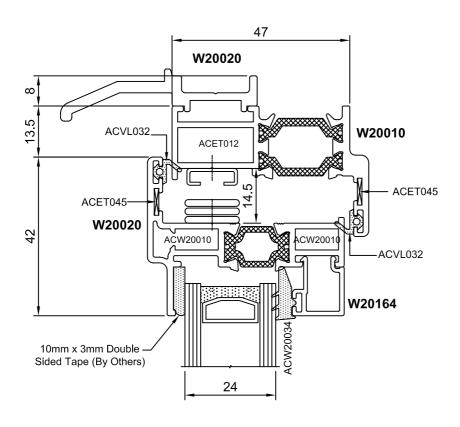


Drawing Number:cW-13-00

Mullion

8a Sections Scale 1:1





Evolution



Drawing Number:cW-14-00

Transom

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|-----------------------------------|----------|-----------|
| | | |

Evolution



Drawing Number:cW-15-00

Transom

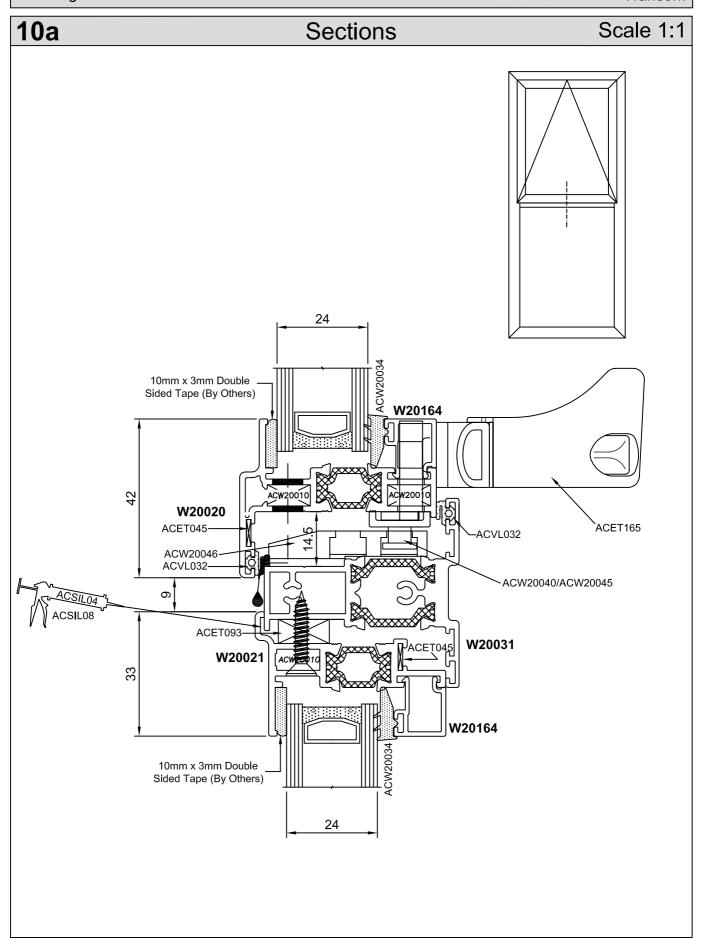
| | Sections | Scale 1:1 |
|----------|--|-----------|
| this Pac | sections because the section of the sections of the sections of the section of th | |
| | | |

Evolution



Drawing Number:cW-16-00

Transom





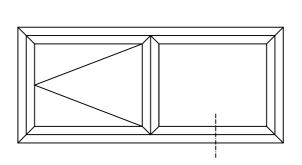
Evolution

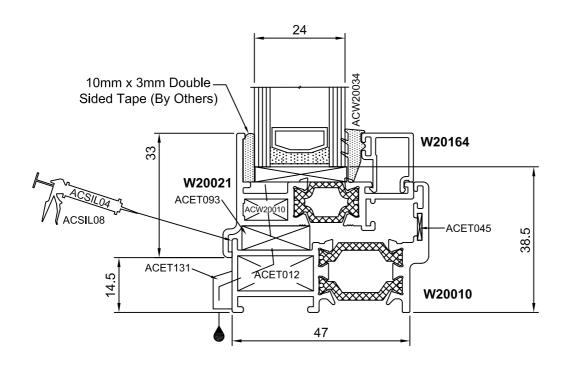
Section 'C'

Dunmmy Vent

Drawing Number:cW-17-00

Scale 1:1 Sections 11







Evolution

Section 'D'

Cover Page Drawing Number:dW-00-00

Statics

STATICS

(Not Yet Available)

Evolution



Drawing Number:dW-00-00 Blank Page

Statics

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Evolution

Section 'E'



Drawing Number: eW- -- --

Index Page

Construction Drawings

Window
Construction Drawings

Index

| EIN | Construction Drawings | Page 53 to 54 |
|-----|-----------------------------|---------------|
| E 1 | 1 - Corner Jointing | Page 55 to 57 |
| E 2 | 2 - Transom/Mullion Fixings | Page 58 to 61 |
| E 3 | 3 - Friction Stays / Hinges | Page 62 to 63 |
| E 4 | 4 - Locking Hardware | Page 64 to 70 |
| E 5 | 5 - Bead & Glazing | Page 71 |
| E 6 | 6 - Drainage | Page 72 |
| E 7 | 7 - Miscellaneous | N/A |

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IF IN DOUBT ASK!

Release Date:- January 2009



Evolution

Section 'E'

smart architectural aluminium

Drawing Number: eW- -- -- Blank Sheet

Construction Drawings

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Evolution

Section 'E'

smart architectural aluminium

Construction Drawings

Drawing Number:eW-01-00

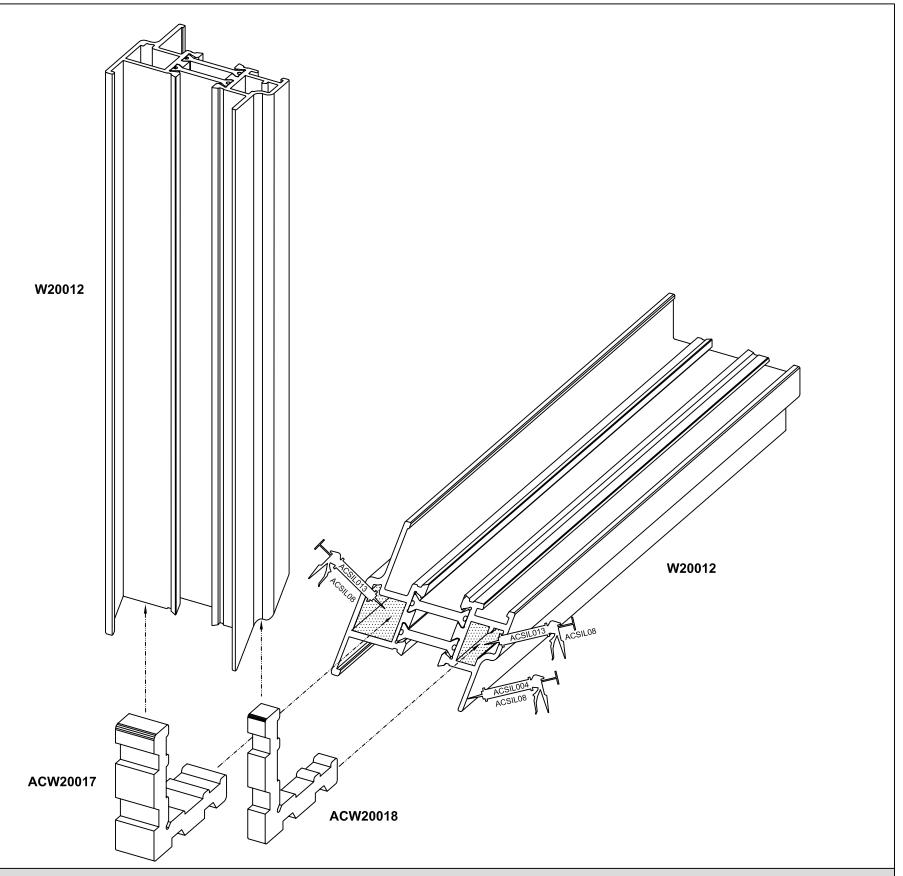
1a

Corner Joint Double Cleat

1a

Notes

- 1. Degrease Mitre Sections
- 2. Seal with ACSIL04
- 3. ACSIL013 Glue in Profile (Pistol ACSIL08)
- 3. Vee Block ACW903
- 4. Punch ACET918





1b

Section 'E'

Evolution

Section 'E'

smart architectural aluminium

Drawing Number:eW-02-00 Construction Drawings

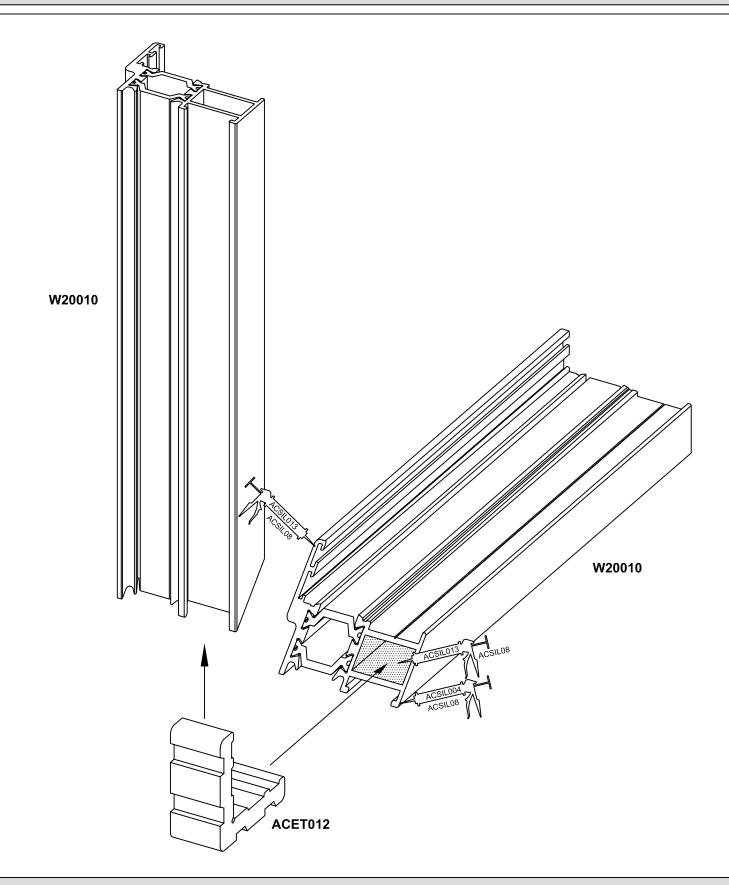
2.4....9 ..4......

Corner Joint Single Cleat

1b

Notes

- 1. Degrease Mitre Sections
- 2. Seal with ACSIL04
- 3. ACSIL013 Glue in Profile (Pistol ACSIL08)
- 3. Vee Block ACW901
- 4. Punch ACET904





Evolution

Section 'E'

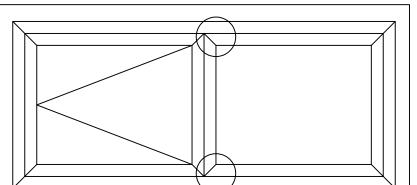
smart

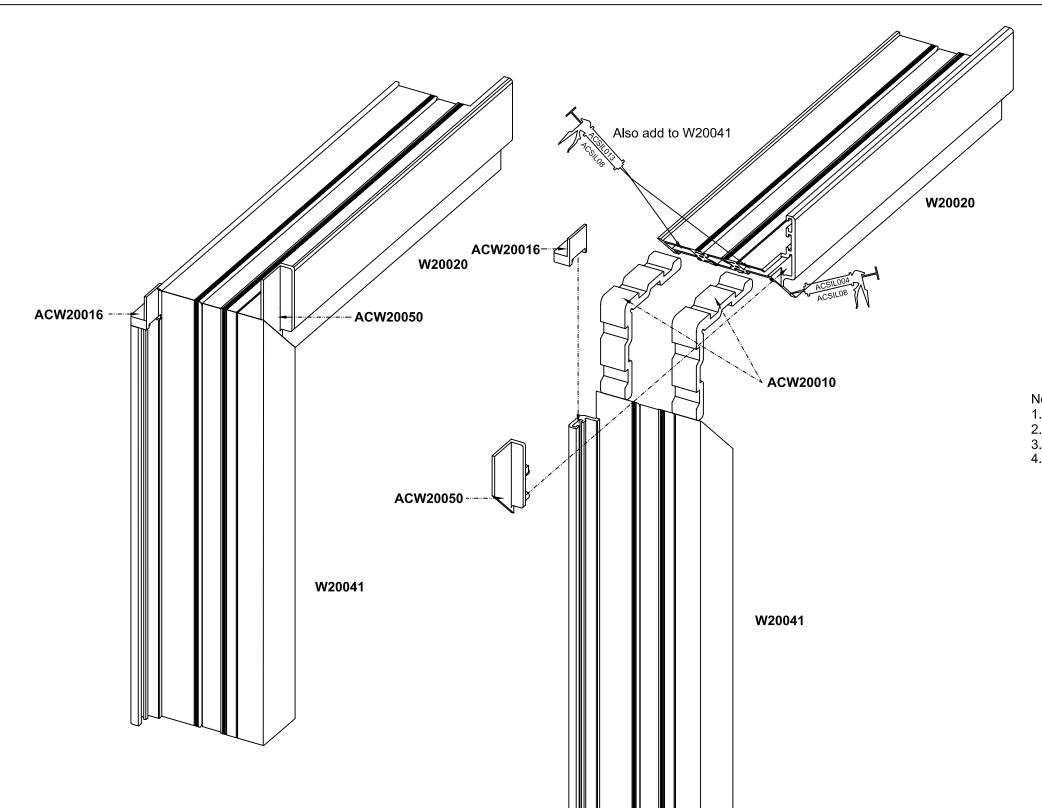
1c

Construction Drawings

Drawing Number:eW-03-00

W20020 to W20041 Joint Detail 1c





Notes:-

- 1. ACW20016 & ACW20050 must be fitted before crimping.
- Apply glue (ACSIL013) to all cleat apertures.
 Apply silicone (ACSIL04) to edge of profile
 For prep detail refer to 4d



Evolution

Section 'E'

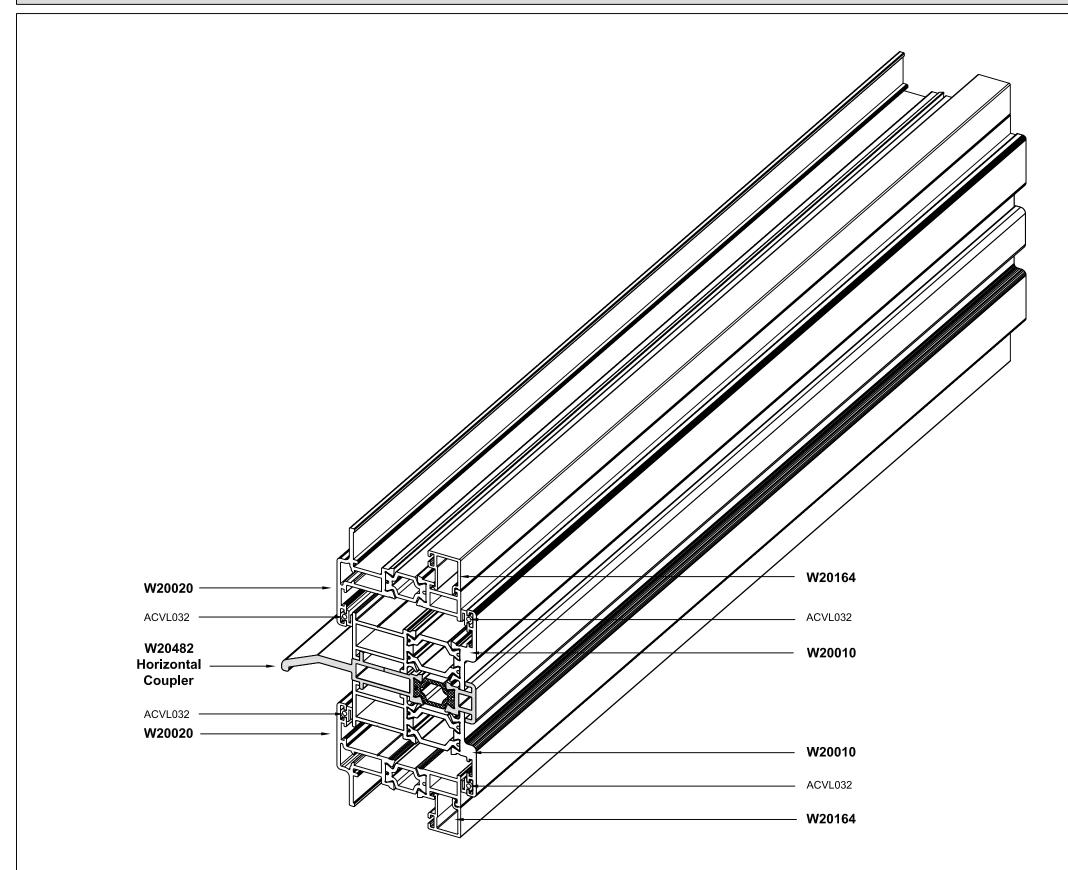
smart architectural aluminium

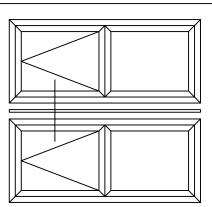
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Construction Drawings











Evolution

Section 'E'

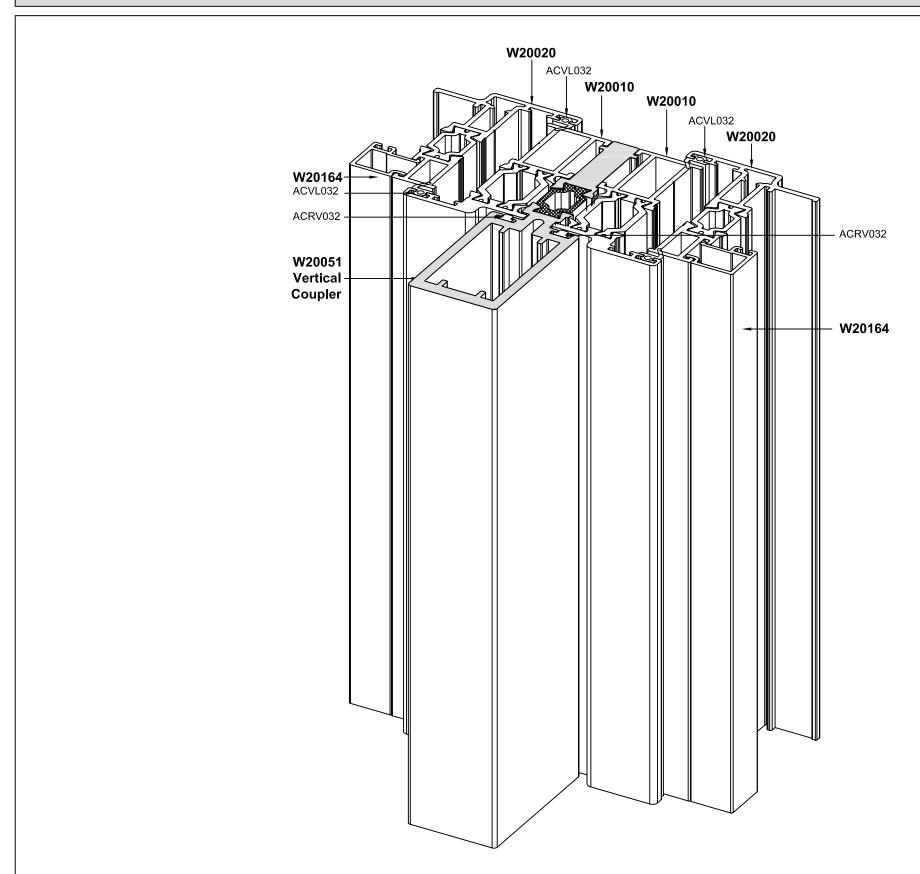
smart architectural aluminium

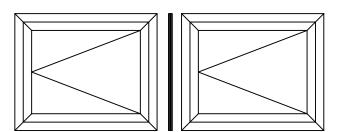
Construction Drawings

Drawing Number:eW-05-00

2b Vertical Coupling Detail









Evolution

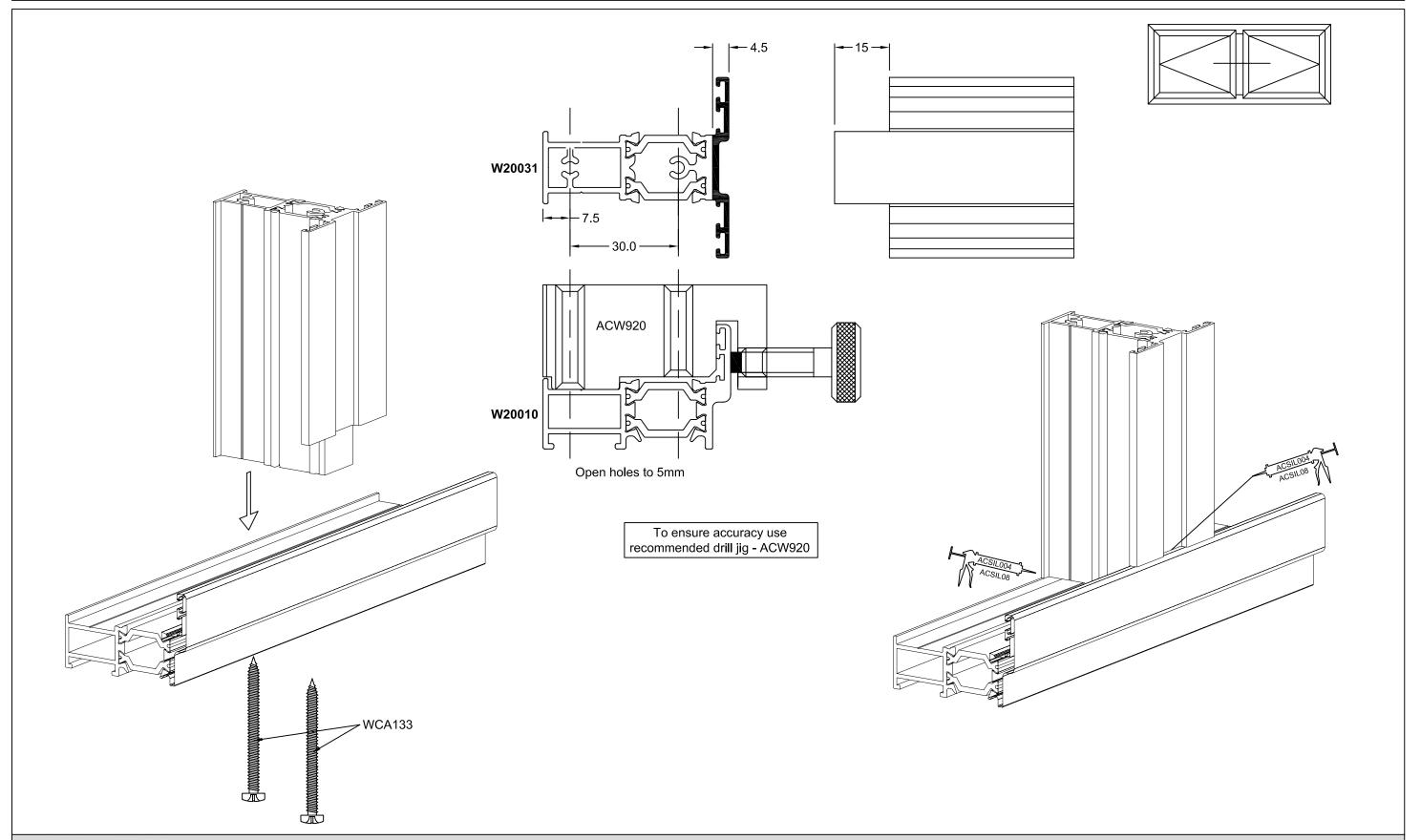
Section 'E'

smart architectural aluminium

Drawing Number:eW-04-00

Construction Drawings

2cMullion/Transom Detail2c





Evolution

Section 'E'

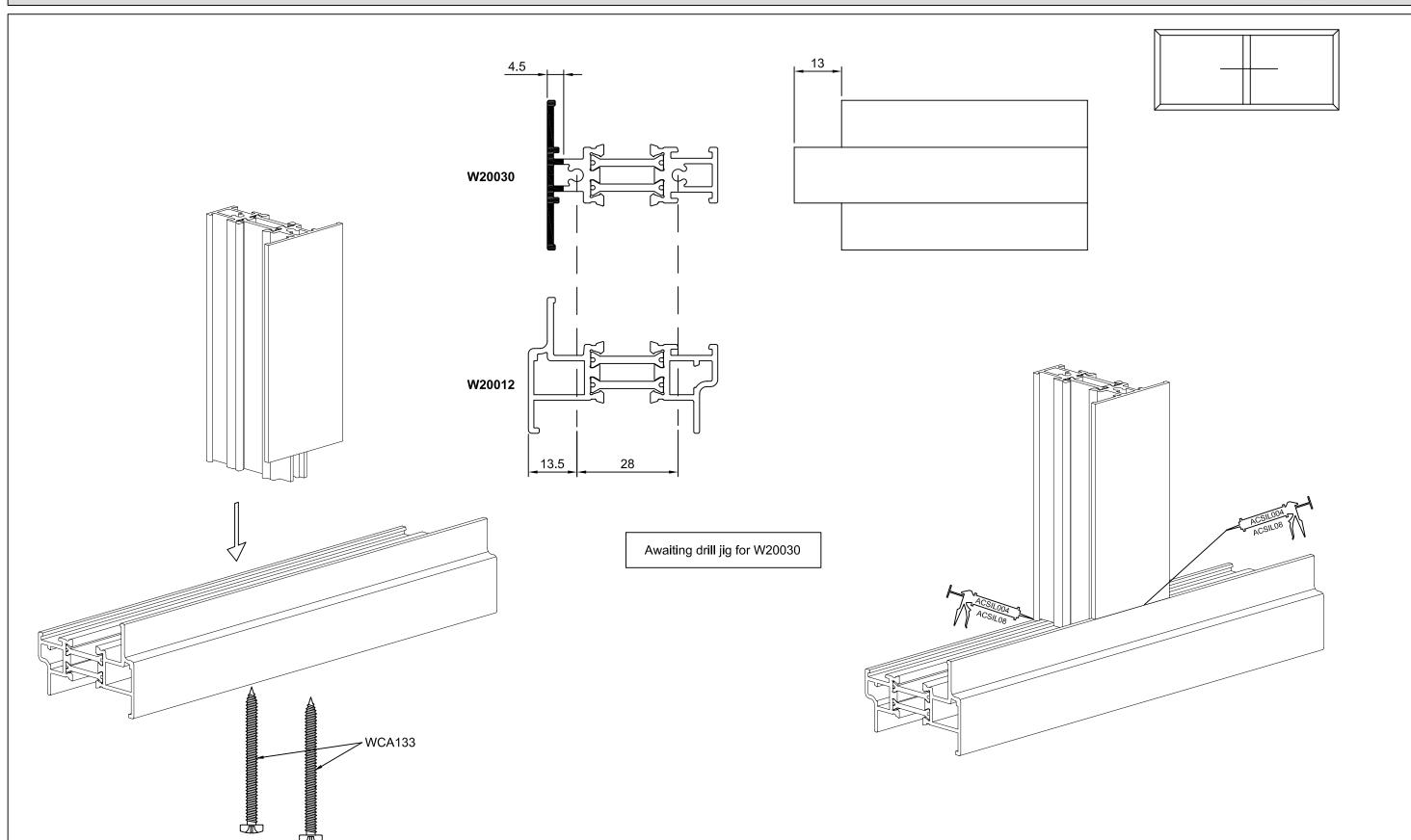
smart architectural aluminium

Drawing Number:eW-05-02

Construction Drawings

2d Mullion/Transom Detail

2d





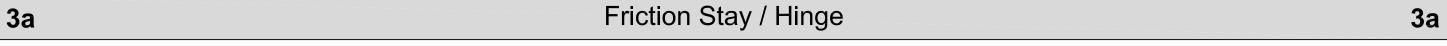
Evolution

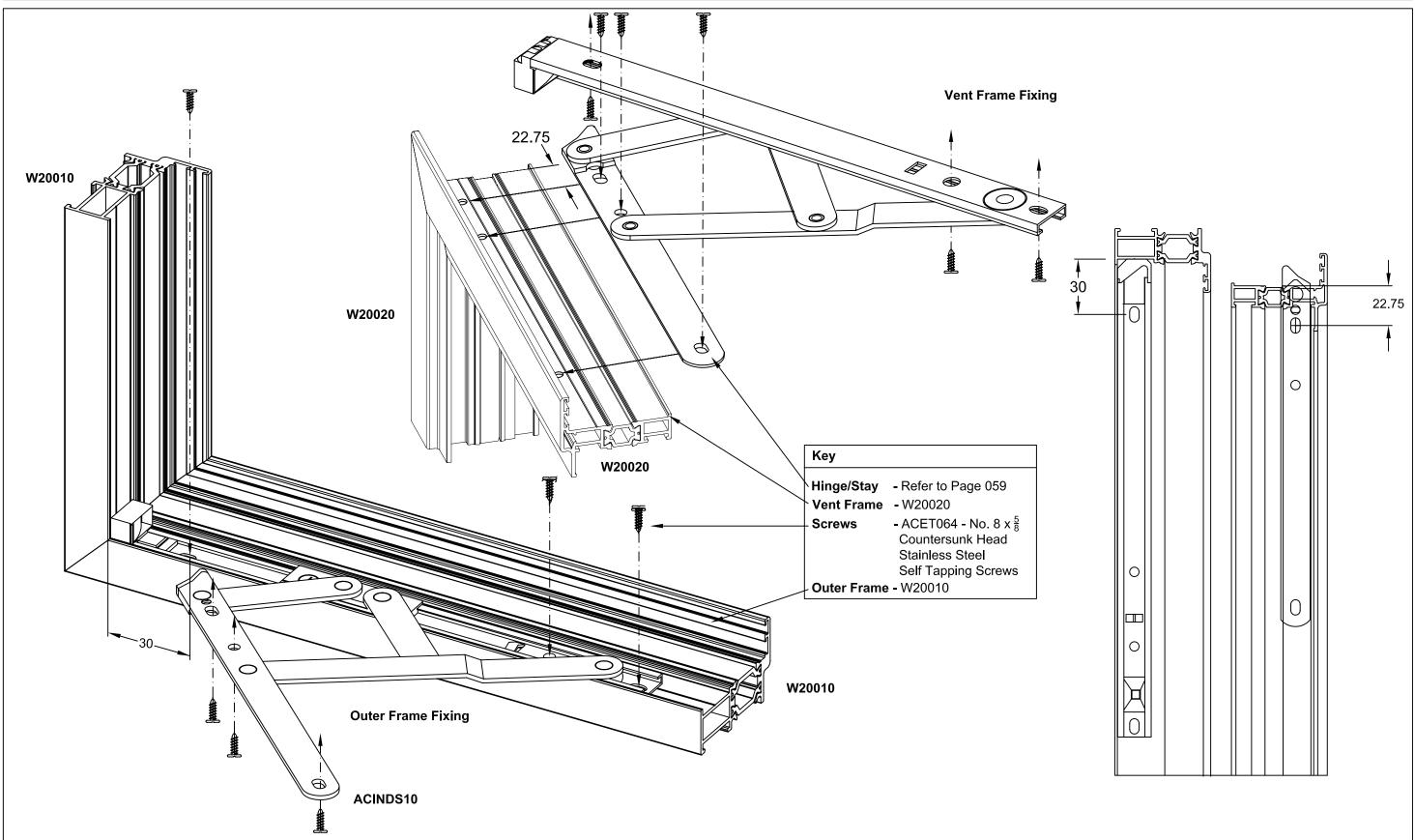
Section 'E'

smart architectural aluminium

Drawing Number:eW-06-00

Construction Drawings







3b

Section 'E'

Evolution

Section 'E'

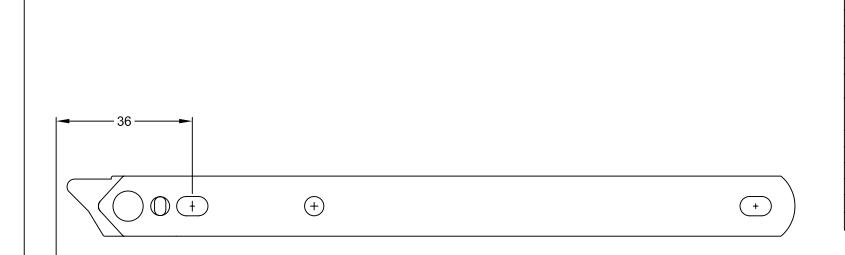
smart architectural aluminium

Construction Drawings

Drawing Number:eW-07-00

Hinge Details Top/Side Hung (13mm)

3b



| | | ge Stays (1 | | | |
|----------|----------------------|--------------|---------|---------|---------|
| | То | p Hung Windo | ws | | |
| Top Hung | t | Max. Vent | Height | | Typical |
| Top Hung | type of Hinge / Stay | Weight | Minimum | Maximum | Width |
| ACINDS10 | | 16 | 220 | 500 | - |
| ACINDS16 | Chair dand | 21 | 420 | 750 | - |
| ACINDS20 | Standard | 24 | 530 | 1000 | - |
| ACINDS24 | | 35 | 630 | 1200 | - |
| CINDA10 | Austenitic | 12 | 270 | 500 | - |
| CINDA16 | | 21 | 420 | 750 | - |
| CINDA20 | | 24 | 630 | 1000 | - |
| CINDA24 | | 35 | 630 | 1200 | - |
| CINV10 | | 20 | 270 | 500 | - |
| CINV16 | Vootor | 21 | 420 | 750 | = |
| CINV20 | Vector | 24 | 630 | 1000 | - |
| CINV24 | | 35 | 630 | 1200 | - |
| CINDR12 | | 21 | 320 | 750 | - |
| CINDR16 | Destricted | 21 | 420 | 750 | - |
| CINDR20 | Restricted | 24 | 530 | 1000 | - |
| CINDR24 | | 35 | 630 | 1200 | - |

Side Hung Windows (13mm Stack)

| Side Hung | type of Hinge / Stay | Max. Vent | Width | | Typical | |
|------------|-----------------------|-----------|---------|---------|---------|--|
| Side Hung | type of Hillge / Stay | Weight | Minimum | Maximum | Height | |
| WUA090SSC | 12" Standard | 24 | 300 | 600 | - | |
| ACINDSSH16 | Standard | | | | | |
| ACINDASH16 | Austenitic | 24 | 420 | 700 | _ | |
| ACINVSH16 | Vector | | | | | |
| ACINDRSH16 | Restricted | | | | | |
| ACINDESH16 | Egress | | | | İ | |

Note1: Vent Height / Width is measured in mm from rebate to rebate (not overall size or outer frame)

Note2: Top hung height and side hung width sizes to be reduced by 2mm where size is 450mm or smaller

Note3: Typical Dimensions based on Max. Size and Glass 30 kg/m²



4a

Section 'E'

Evolution

Section 'E'

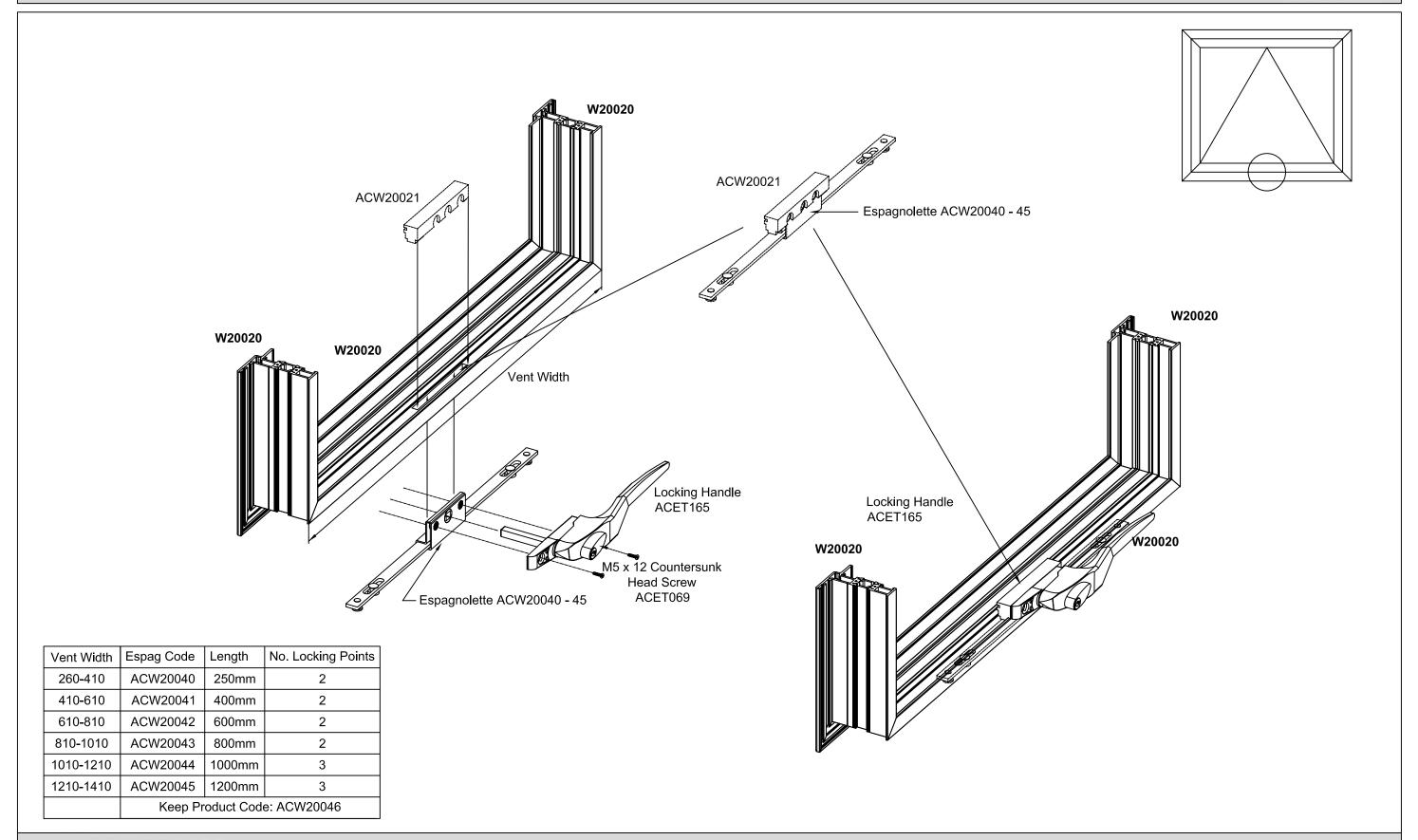
smart architectural aluminium

Drawing Number:eW-08-00

Construction Drawings

W20020 Top Hung Joint Detail with Espagnolette Gearing Assembly

4a





4b

Section 'E'

Evolution

Section 'E'

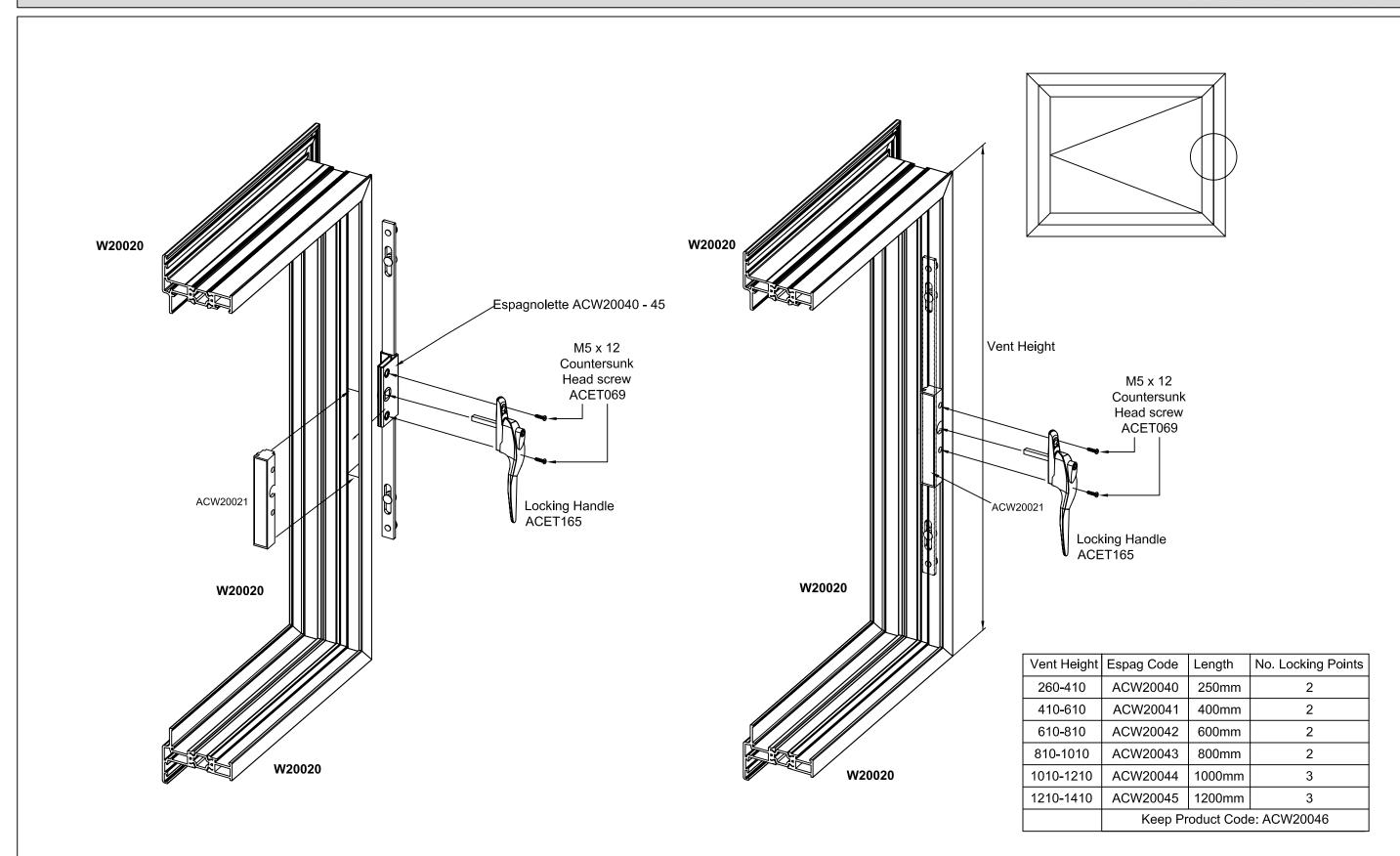
smart architectural aluminium

Construction Drawings

Drawing Number:eW-09-00

W20020 Side Hung Joint Detail with Espagnolette Gearing Assembly

4b





4c

Section 'E'

Evolution

Section 'E'

smart architectural aluminium

Drawing Number:eW-10-00 Construction Drawings

Side Hung with Espagnolette Gearing Assembly

4c

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Evolution

Section 'E'

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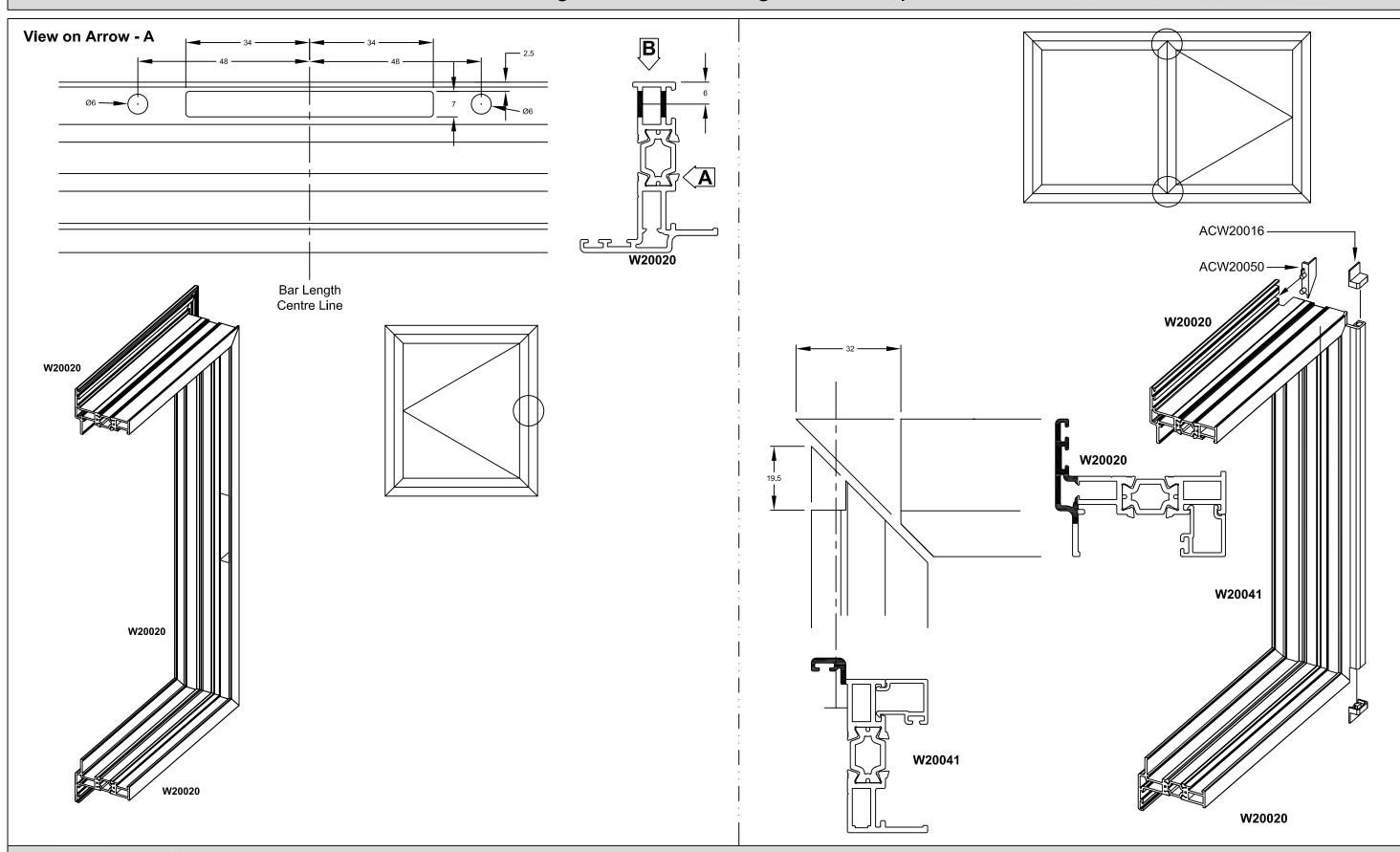
Construction Drawings

Drawing Number:eW-11-00



Routing for lock & Cutting for End Caps

4d





Evolution

Section 'E'

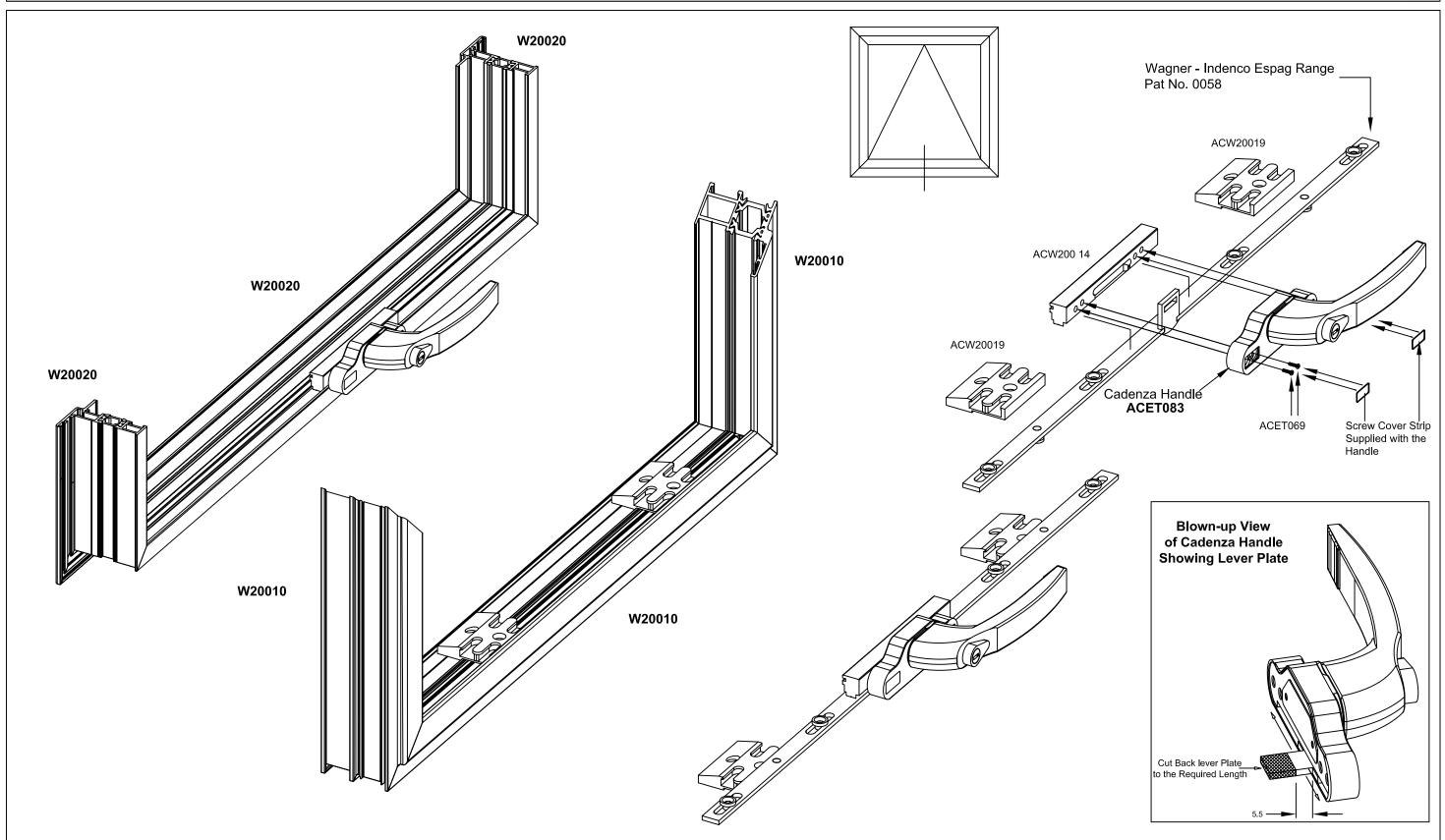
smart architectural aluminium

Drawing Number:eW-12-00

Construction Drawings



4e





4f

Section 'E'

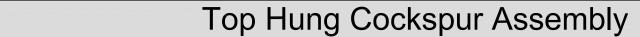
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Section 'E'

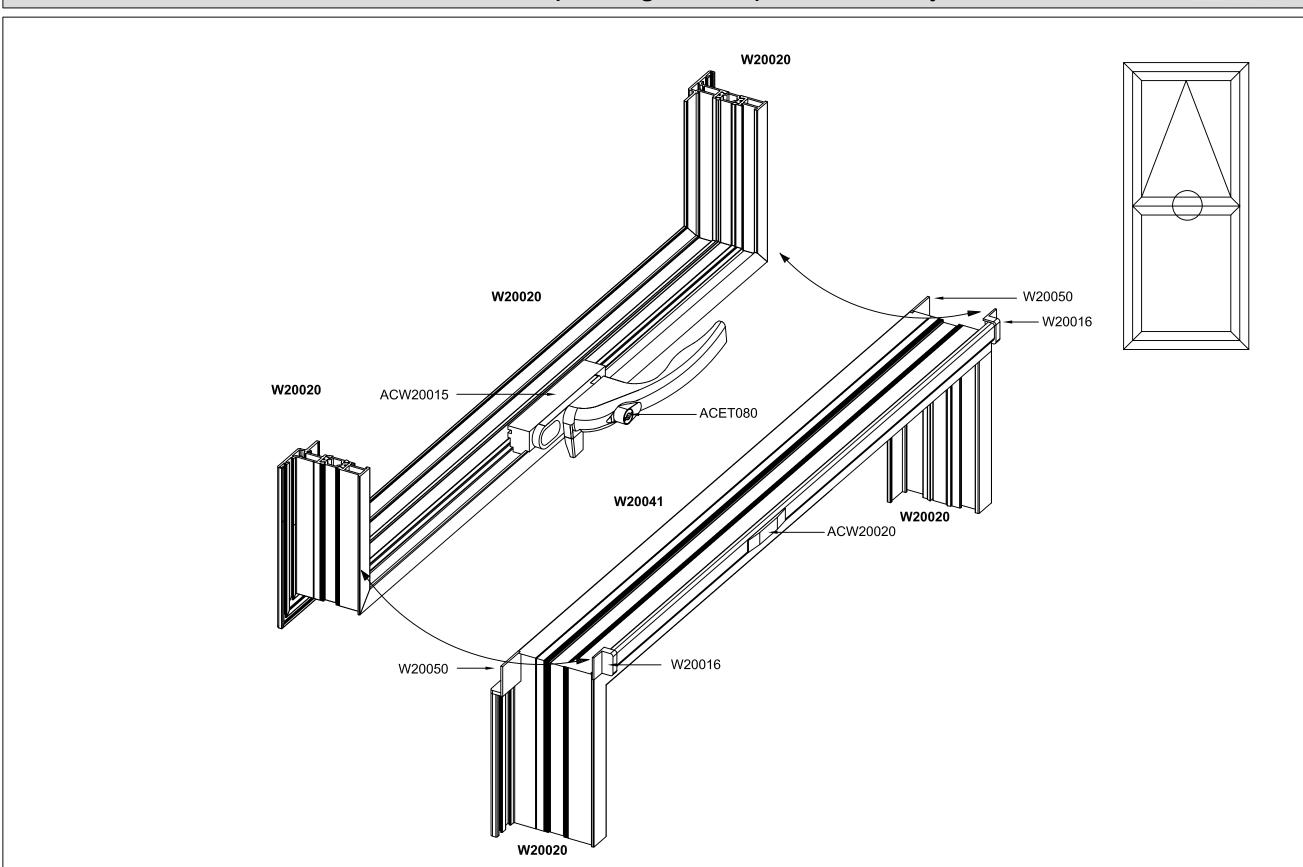
smart architectural aluminium

Construction Drawings

Drawing Number:eW-13-00









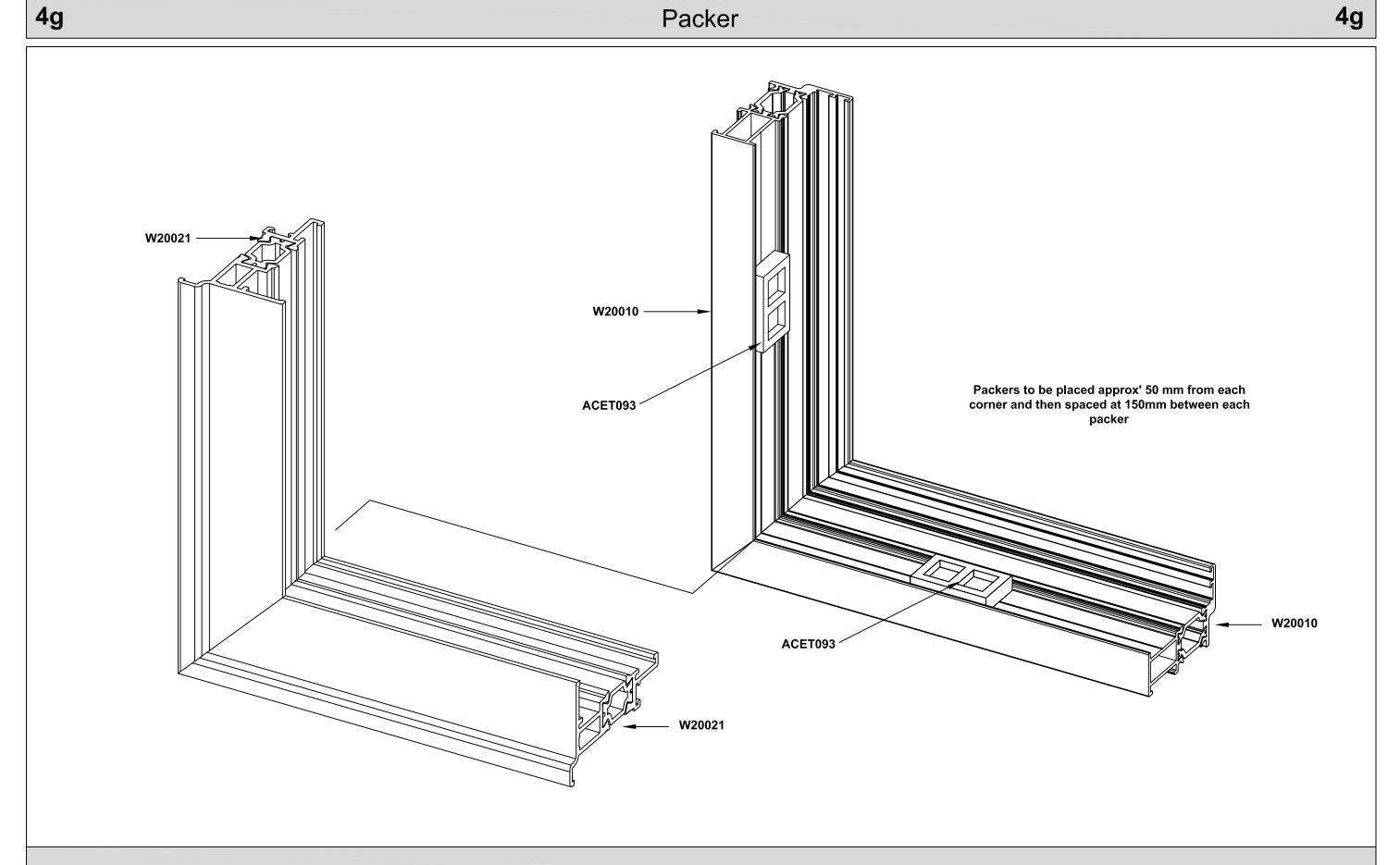
Evolution

Section 'E'

smart architectural aluminium

Drawing Number:eW-14-00

Construction Drawings





Evolution

Section 'E'

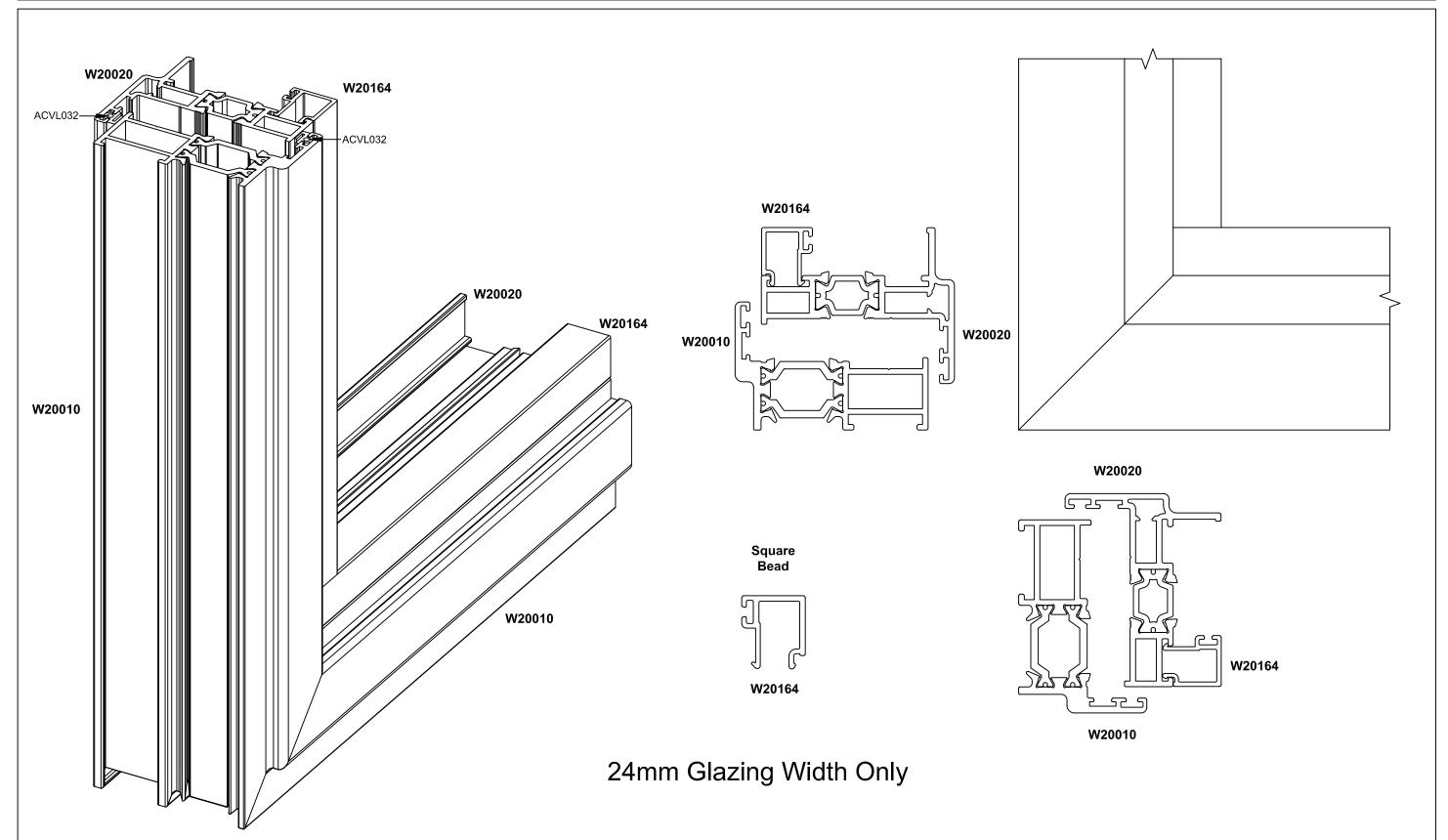
smart architectural aluminium

Construction Drawings

Release Date:- January 2009

Drawing Number:eW-15-00







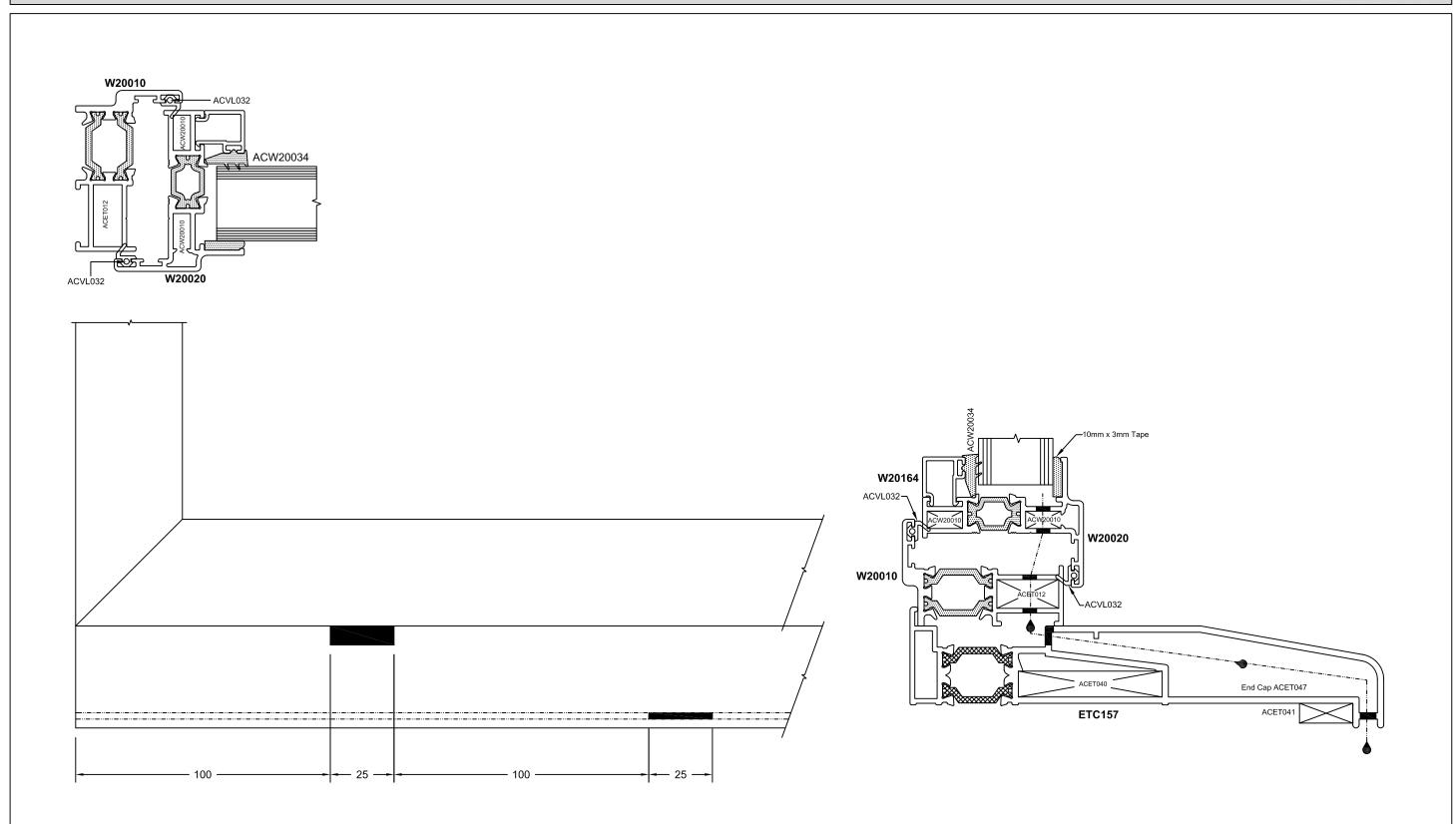
Evolution

Section 'E'

smart architectural aluminium

Drawing Number:eW-16-00 Construction Drawings

6a Drainage 6a



| smart | |
|-------------------------|--|
| architectural aluminium | |

Release Date:- January 2009

Section 'F'

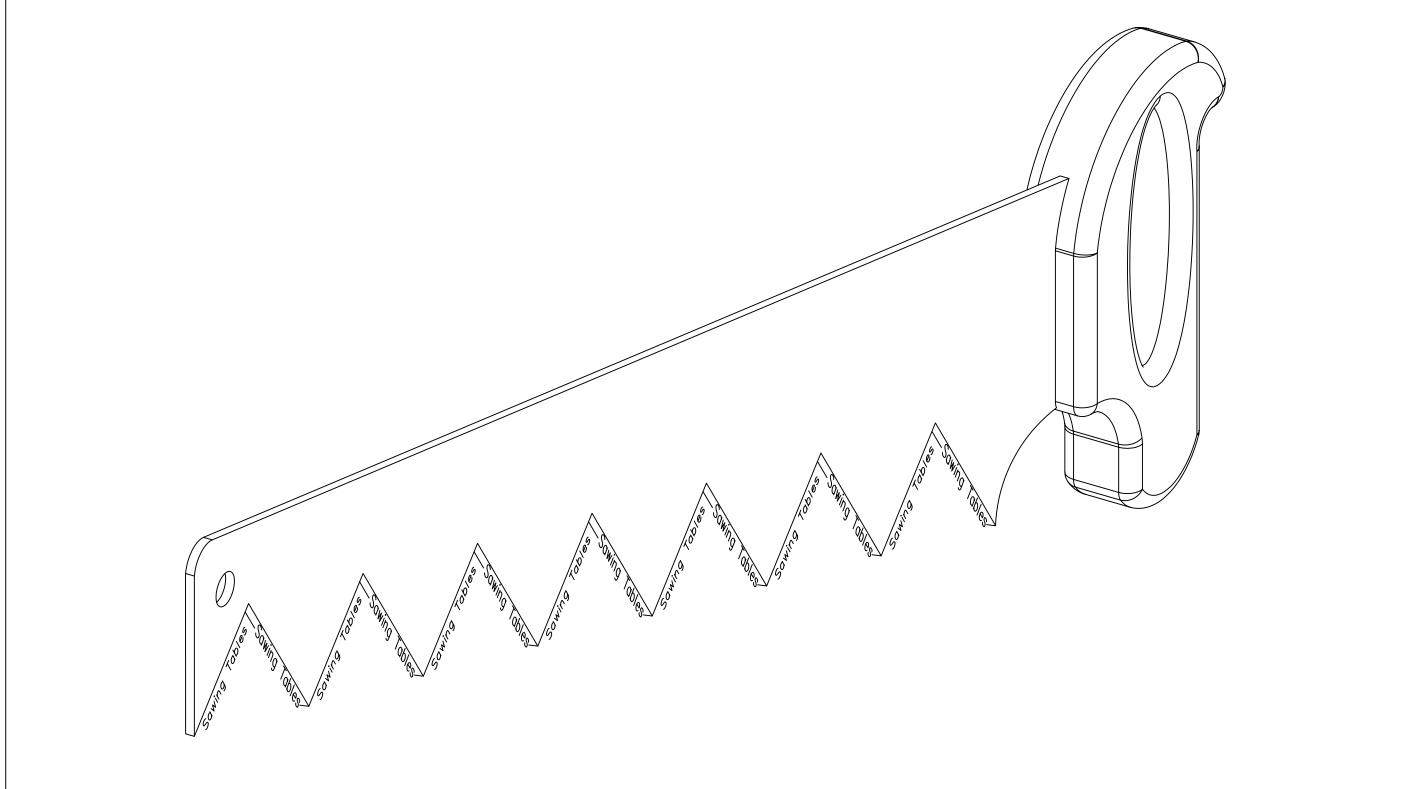
Evolution

Section 'F'

smart architectural aluminium

Cover Page Drawing Number: fW-01-00

01





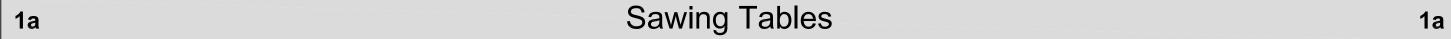
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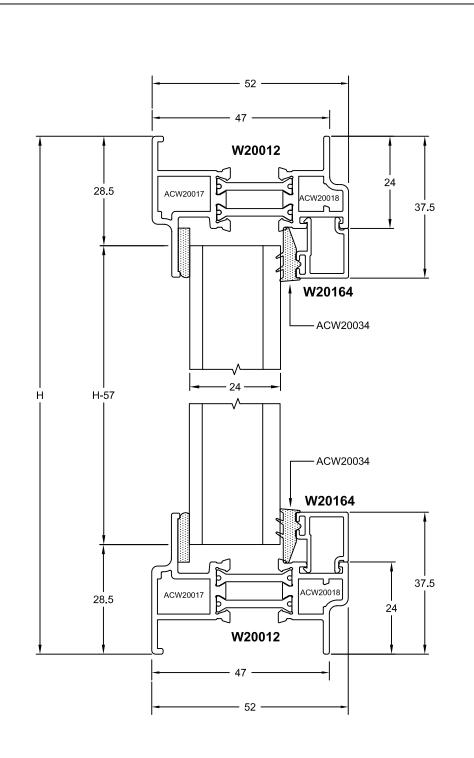
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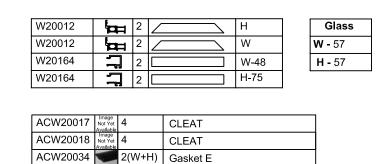
smart architectural aluminium

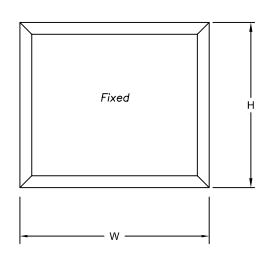
Drawing Number:fW-02-00

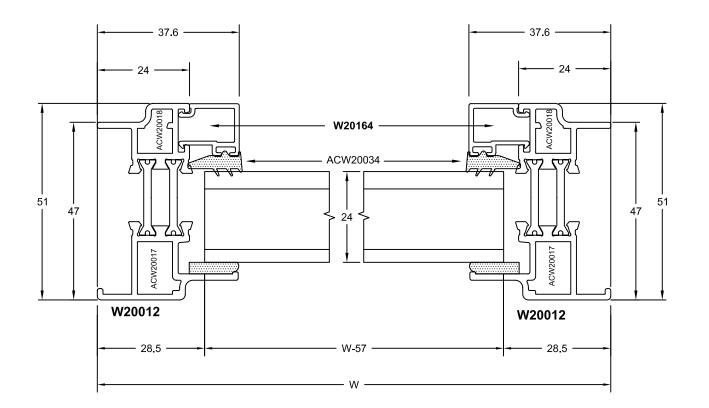
Fixed Light Outer Frame













Release Date:- January 2009

Section 'F'

Evolution

Section 'F'

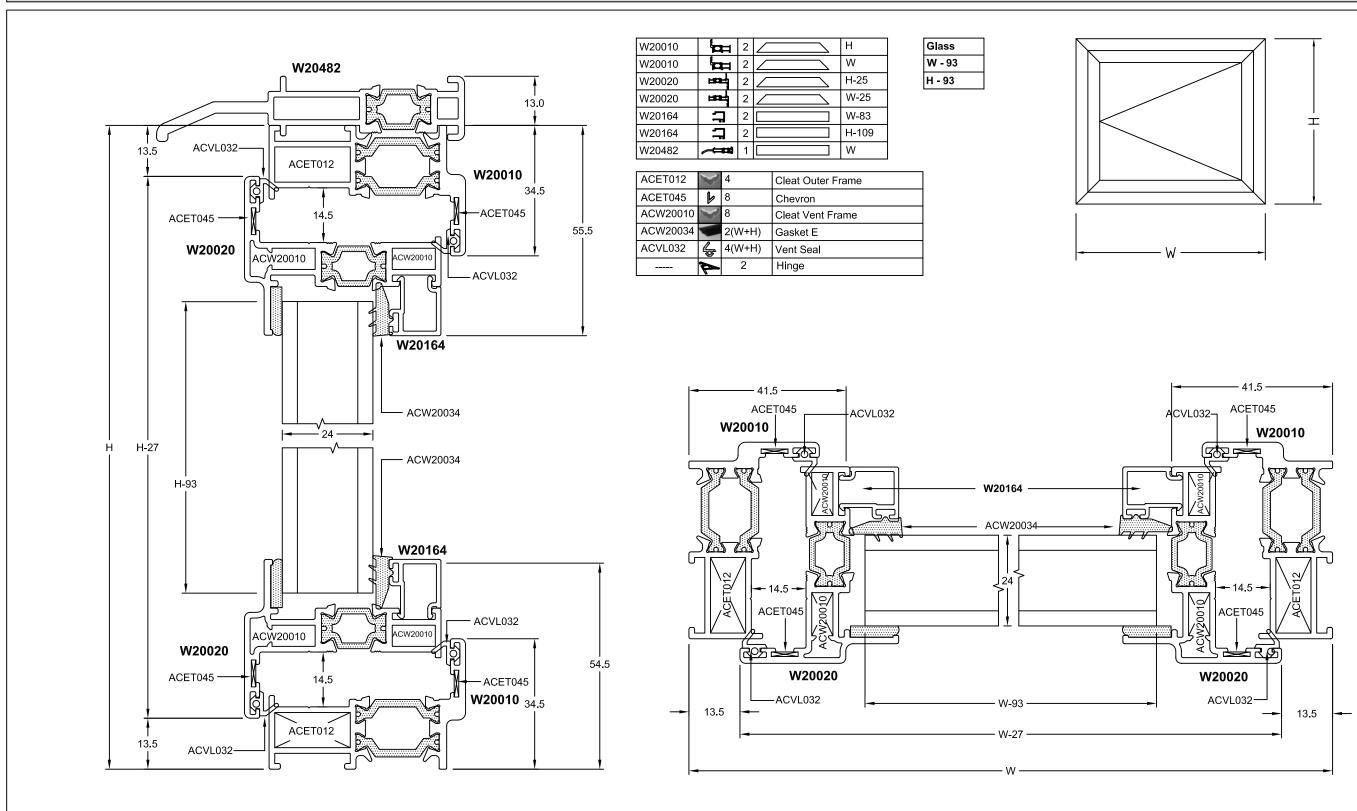
smart architectural aluminium

Vent Frame Casement Open Out with W20020

Drawing Number: fW-03-00

2a Sawing Tables

2a





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Section 'F'

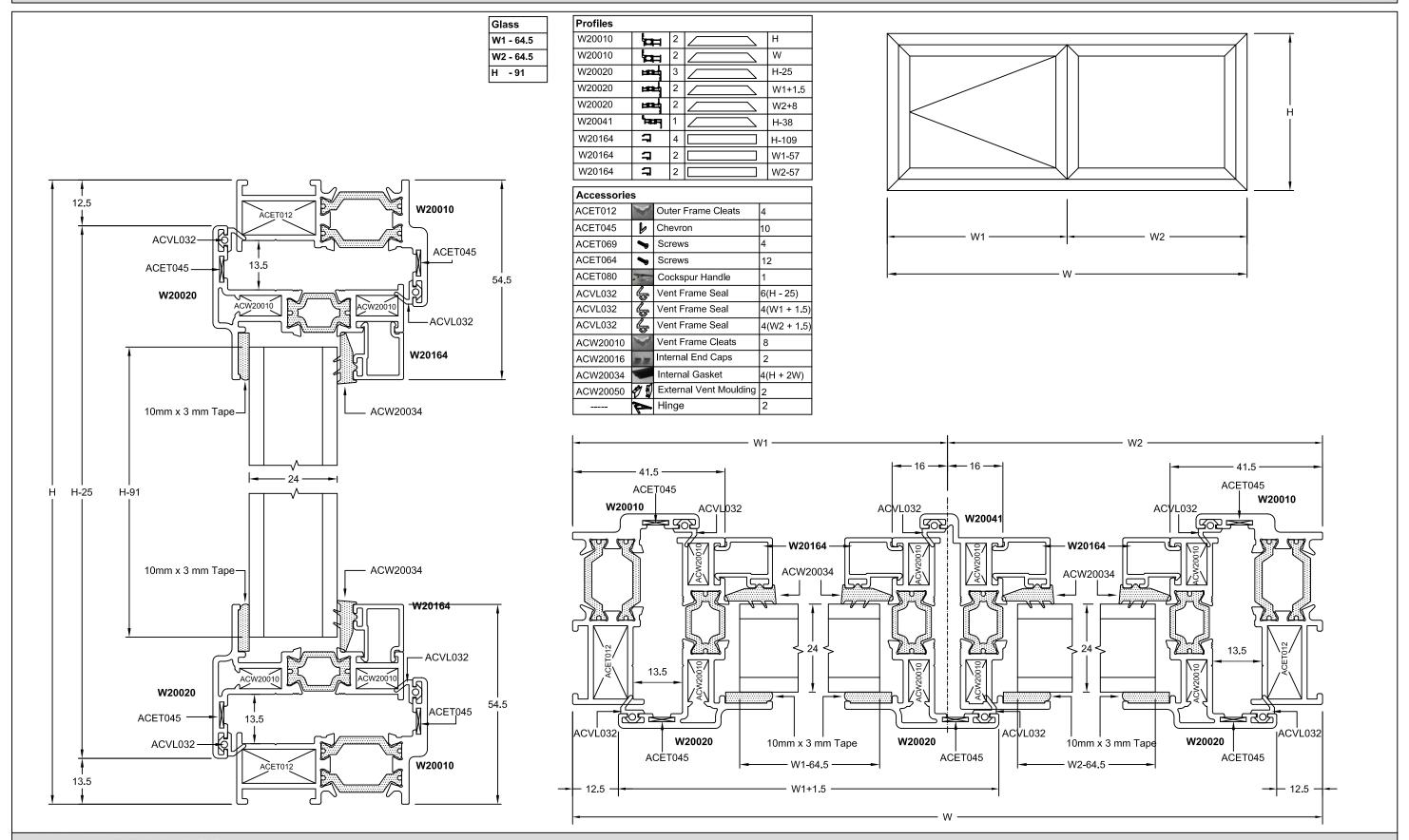
Evolution

Section 'F'

smart architectural aluminium

Drawing Number: fW-04-00 Window Vent with 1 Fixed Panel

3a Sawing Tables 3a





Evolution

Section 'F'

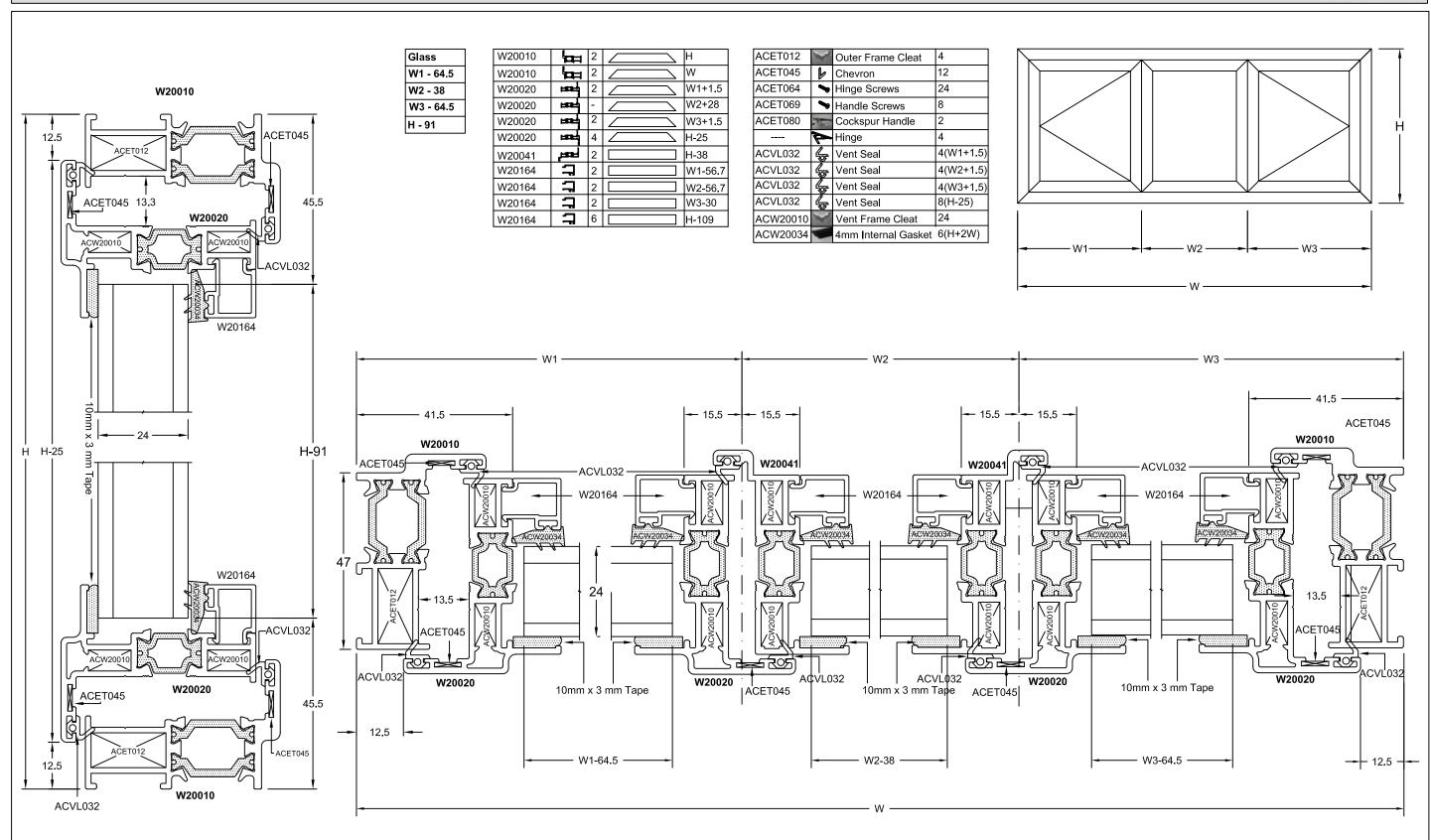


Drawing Number: fW-05-00 Window 2 Vents + 1 Fixed

4a

Sawing Tables







5a

Section 'F'

Evolution

Section 'F'

smart architectural aluminium

Drawing Number: fW-06-00

Window Vent with 1 Fixed Panel

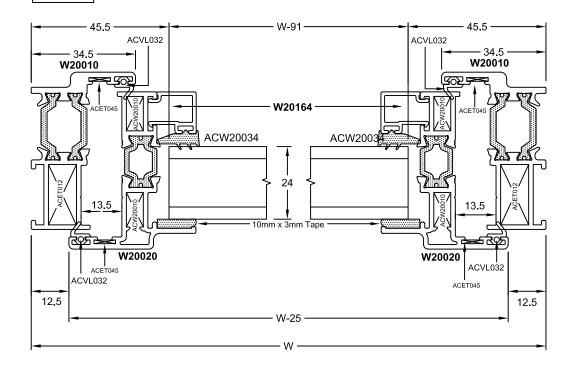
Sawing Tables

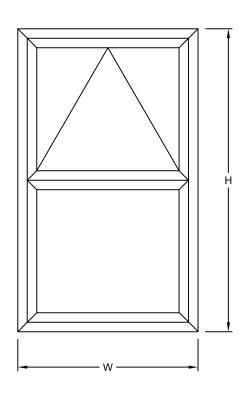
5a

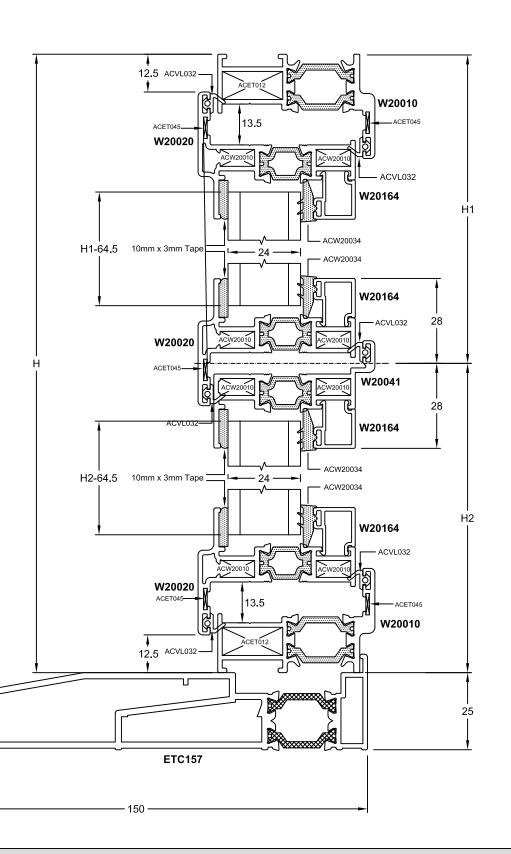
| W20010 | ļ a ⊟ | 2 | Н |
|--------|------------------|---|---------|
| W20010 | ¦⊐⊟ | 2 | W |
| W20020 | 12324 | 3 | W-25 |
| W20020 | 1222 | 2 | H1+1.5 |
| W20020 | 12224 | 2 | H2+8 |
| W20041 | Lend, | 1 | W-38 |
| W20164 | 77 | 4 | W-83 |
| W20164 | 17 | 2 | H1-82.5 |
| W20164 | 7 | 2 | H2-82.5 |

| ACET012 | 8 | Outer Frame Cleats | 4 |
|----------|----------|---------------------|-----------|
| ACET045 | T | Chevron | 10 |
| ACET064 | 4 | Hinge Screws | 12 |
| ACET069 | 4 | Handle Screws | 2 |
| ACET080 | Ħ | Cockspur Handle | 1 |
| | Ø | Hinge | 2 |
| ACVL032 | 6 | Flipper Gasket | 6(W+25) |
| ACVL032 | 6 | Flipper Gasket | 2(H1+1.5) |
| ACVL032 | 4 | Flipper Gasket | 2(H2+1.5) |
| ACW20010 | 1 | Vent Frame Cleat | 16 |
| ACW20034 | | 4mm Internal gasket | 4W+2H |

| ACW20034 | - |
|-----------------|---|
| | |
| Glass | |
| W- 91 | |
| H1- 64.5 | |
| H2 64 5 | i |









Evolution

Section 'F'

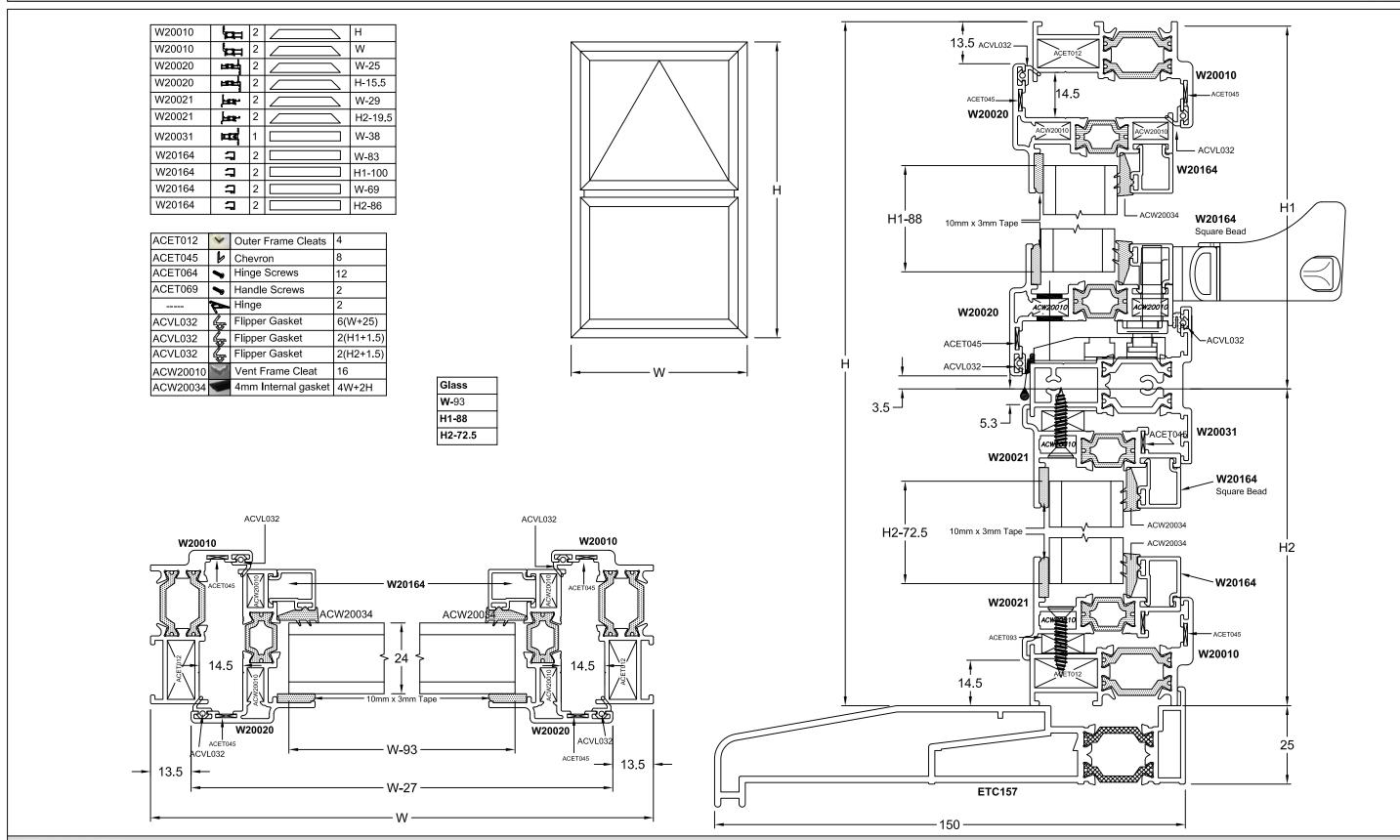
smart architectural aluminium

Opening Vent Above Reverse Adaptor

Drawing Number: fW-07-01

6a Sawing Tables

6a





Evolution Profiles

Section 'F'



Drawing Number: fW-09-00 Wall Chart

