SERIES 3000 MULTIPLANE STOREFRONT
INSTALLATION AND GLAZING MANUAL

Note: Installation and Glazing Manuals are product specific. FOR REVIEW ONLY!
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GENERAL INFORMATION

The Oldcastle BuildingEnvelope® (2 x 4 1/2) system represents the latest in product development technology complemented by dealer on-the-job input and experience. Proper use of these systems will assure optimum results in erection and long term performance.

Oldcastle BuildingEnvelope® does not control the application nor selection of its product configurations, sealant or glazing materials and assumes no responsibility thereof. It is the responsibility of the owner, architect and installer to make these selections in strict compliance with applicable laws and building codes.

PROTECTION AND STORAGE:

Handle the material carefully. Do not drop from the truck. Stack with adequate separation so that the material will not rub together. Store material off the ground. Protect against the elements and other construction hazards by using a well ventilated covering. Remove material from package if it is wet or is located in a damp area.

CHECK MATERIAL:

Check all material upon arrival for quality and to assure against shipping damage. Any visible damage must be noted on the freight bill at the time of receipt. If a claim is required, then the receiving party must process a claim with the freight company.

Completely check construction which will receive your materials against contract documents. Notify the general contractor by letter of any discrepancies before proceeding with the work. Failure to do so constitutes acceptance of work by other trades.

Check shop drawings and installation instructions to become familiar with the project. The shop drawings take precedence and include specific details for the project. The installation instructions are of a general nature and cover the most common conditions. Due to varying job conditions, all sealants used should be approved by the sealant manufacture, to insure they will function for conditions shown on instructions and shop drawings. They must be compatible with all surfaces in which adhesion is required, including other sealant surfaces. Use primers where directed by manufacturer of sealants. Be sure to properly store sealants at recommended temperatures and check sealant for remainder of shelf life before using.

FIELD CONDITIONS:

• Do not install wall if there is a walk way with a downslope towards an entrance or a storefront

• All materials to be installed plumb, level, and true. Aluminum to be placed in direct contact with the masonry or incompatible materials, should be isolated with a heavy coat of zinc-chromate or bituminous paint.

• After sealant is set and a representative amount of the wall has been glazed (250 square feet or more), run a water hose to check installation. On large jobs, hose test should be repeated during glazing operation. Test should be conducted in accordance with AAMA 501.2 specifications.

• Coordinate protection of installed materials with general contractors and other trades.
GENERAL INFORMATION CONT.

CLEANING MATERIALS:

Cement, plaster, terrazzo, alkaline and acid based materials used to clean masonry are very harmful to finishes and should be removed with water and a mild soap immediately or permanent staining will occur. A spot test is recommended before any cleaning agent is used.

EXPANSION JOINTS:

Expansion joints and perimeter seals shown in these instructions and in the shop drawings are shown at normal size. Actual dimensions may vary due to perimeter conditions and/or differences in metal temperature between the time of fabrication and time of installation. For example, a 12 foot unrestrained length of aluminum extrusion can expand or contract 3/32 of an inch over a 50 degree Fahrenheit change. Any movement potential should be accounted for at time of the installation.

THERMAL IMPROVEMENT SUGGESTIONS:

To maintain or improve your wall installation, the following items should be considered:

1. Blinds or drapes prevent warm air from washing the window.

2. Warm air ventilators too far from window will not adequately wash the window with air to prevent condensation.

3. In extreme conditions, the fan of the heating systems should not cycle on and off, but run continuously.

4. Some heating systems have a water injection feature that can raise humidity levels. The higher the humidity levels the more likely condensation or frost will form. Raising the temperature and reducing humidity will usually solve this problem.

5. On rare occasions, an extremely cold storm may cause frost to appear on the glass or framing. A space heater and electric fan blowing along the plane of the window wall can reduce or eliminate this temporary condition.

FABRICATION SUGGESTIONS:

The use of our EZ Punch tool is recommended for faster and more accurate fabrication of wall systems. If hand fabricating the mullions; drill fixtures are available to improve accuracy. Fabrication instructions for use of these drill fixtures are described within this manual on pages 37 through 41.
FRAME FABRICATION
(Storefront Typical Installations)

Measure ROUGH OPENING to determine FRAME WIDTH and FRAME HEIGHT dimensions. Allow 1/4" minimum clearance for shimming and caulking around perimeter of frame. (FG-3413 Sill Receptor requires minimum 3/8" joint at head)

Cut material to size per dimensions given below:
Frame Members
Sub-Sill or Sill Receptor: Frame Width Plus 1/4"
Mullion & Mull Fillers: Frame Height (Rough Opening minus Head & Sill joints minus Sub Sill height; FG-3223 minus 3/8", FG-3413 minus 1/2")

Horizontal, Sill & Head: Day Light Opening (D.L.O.)
Horizontal Glazing Beads & Fillers: D.L.O. minus 1/16"

Accessories
Vertical Gaskets: D.L.O. Plus 1" Plus 3/8" per foot

Other Members (as required)
Horizontal Glazing Adaptors: D.L.O. minus 1/16"
Vertical Glazing Adaptors: D.L.O. Plus 7/8"
Door Jamb: Rough Opening minus Head Joint
Measure ROUGH OPENING to determine FRAME WIDTH and FRAME HEIGHT dimensions. Allow 1/4" minimum clearance for shimming and caulking around perimeter of frame. (FG-3413 Sill Receptor requires minimum 3/8" joint at head) (Reference page 6 for elevation and terminology)

Cut material to size per dimensions given below:

**Frame Members**
- Sub-Sill or Sill Receptor: Frame Width Plus 1/4"
- Mullions & Jamb (see Dtl. A): Overall Frame Height Minus 3" Minus Sub-sill Height (FG-3223 Minus 3/8", FG-3413 Minus 1/2"

**Head & Sill**
- Frame Width
- Horizontal (Screw Spline Assembly): Day Light Opening (D.L.O.)
- Horizontal (Shear Spline Assembly): D.L.O. Minus 1/16"
- Horizontal Glazing Beads & Fillers: D.L.O. Minus 1/16"

**Accessories**

**Other Members (as required)**
- Horizontal Glazing Adaptors: D.L.O. Minus 1/16"
- Vertical Glazing Adaptors: D.L.O. Plus 7/8"
- Door Jamb: Rough Opening Minus Head Joint
INSTALLATION FOR THERMAL PERFORMANCE

NOT RECOMMENDED

PREFERRED

SHIM & AIR SPACE MINIMUM 1/4" THICK

NOT ENOUGH METAL EXPOSED AT "X"

TO DERIVE THE GREATEST BENEFIT FROM YOUR STOREFRONT INSTALLATION, WE RECOMMEND YOU REVIEW THE DETAILS ABOVE.
INSTALLATION INSTRUCTIONS FOR FG-3223 SUB-SILL

INSTALL SUB-SILL AND END DAM

ANCHOR SUB-SILL WITHIN 4" FROM EITHER SIDE OF INTERMEDIATE MULLIONS ANCHOR SIZE AND FREQUENCY SHOULD BE DETERMINED BY STRUCTURAL REQUIREMENTS. CAP SEAL ANCHORS AS SHOWN.

SEAL END DAM TO SUB-SILL.

DRILL 5/16" WEEP HOLES LOCATE AT MID-LITE

INSTALL SPLICE SLEEVE

SEAL WITH A NON-SKINNING NON-HARDENING SEALANT. FILL BREAK IN FLASHING AND UNDER SPLICE.

SEAL SUB-SILL VERTICAL SPLICE JOINT

JUST PRIOR TO FRAME INSTALLATION, APPLY CONTINUOUS SEALANT ALONG GROOVE IN BACK LEG OF SUB-SILL. IMMEDIATELY INSTALL FRAME INTO SILL.

CLEAN EXCESS SEALANT AFTER INSTALLATION OF SYSTEM.

SEAL SUB-SILL SPLICE JOINTS UP VERTICAL LEG OF FLASHING AND MARRY INTO PERIMETER SEAL.

NOTE:
1) SUB-SILL SHALL BE INSTALLED LEVEL AND SHOULD NEVER TILT TOWARDS INTERIOR OF BUILDING.
2) REFERENCE PAGE 43 FOR END REACTIONS FOR SPECIFIC SILL ANCHORS.
3) SPLICE SUB-SILL AT MID-LITE ON LONG RUNS.
INSTALL SILL RECEPTOR AND END DAM
NOTE: IF A TWO PIECE HEAD RECEPTOR IS NOT USED, A 1/4" MINIMUM CLEARANCE IS REQUIRED AT THE HEAD CONDITION TO ALLOW FRAME INSTALLATION.

ANCHOR SILL RECEPTOR WITHIN 4" FROM EITHER SIDE OF INTERMEDIATE MULLIONS. ANCHOR SIZE AND FREQUENCY SHOULD BE DETERMINED BY STRUCTURAL REQUIREMENTS. CAP SEAL FLASHING ANCHORS AS SHOWN.

INSTALL SPLICE SLEEVE
NOTE: INSTALL SILL RECEPTOR LEVEL.

SEAL WITH A NON-SKINNING NON-HARDENING SEALANT. FILL BREAK IN FLASHING AND UNDER SPLICE.

SEAL SILL RECEPTOR VERTICAL SPLICE JOINT

JUST PRIOR TO FRAME INSTALLATION, APPLY CONTINUOUS SEALANT ALONG GROOVE IN FRONT AND BACK LEGS OF SILL RECEPTOR AND AROUND JOINT AS SHOWN. IMMEDIATELY INSTALL FRAME INTO SILL.

NOTE:
1) SILL RECEPTOR SHALL BE INSTALLED LEVEL AND SHOULD NEVER TILT TOWARDS INTERIOR OF BUILDING.
2) THE FG-3413 SILL RECEPTOR IS DESIGNED TO WITHSTAND A MAXIMUM END REACTION OF 600 LBS.
3) SPLICE SILL RECEPTOR AT MID-LITE.
OUTSIDE GLAZED, CENTER SET SCREW SPLINE FRAME ASSEMBLY

APPLY SILICONE SEALANT TO END OF HORIZONTALS AS SHOWN

APPLY SILICONE SEALANT 4" UP INTERIOR SNAP JOINT

APPLY SILICONE SEALANT IN GLAZING REGLET OF VERTICAL WHERE IT MARRIES WITH SEALANT APPLIED TO THE HORIZONTALS

REFERENCE PAGE 37 FOR USE OF DJ-8 DRILL FIXTURE.
OUTSIDE GLAZED, CENTER SET SHEAR BLOCK FRAME ASSEMBLY

APPLY SILICONE SEALANT IN GLAZING REGLET OF VERTICAL WHERE IT MARRIES WITH SEALANT APPLIED TO THE HORIZONTALS

<table>
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<td>29/32&quot;</td>
<td>#11 (0.191Ø) TAP HOLE (TYP.)</td>
</tr>
<tr>
<td>1&quot;</td>
<td>TOP OF HORIZONTAL</td>
</tr>
<tr>
<td>1 1/4&quot;</td>
<td>FG-3495</td>
</tr>
<tr>
<td>1 3/4&quot;</td>
<td>FG-3514</td>
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<tr>
<td>1 3/4&quot;</td>
<td>APPLY SILICONE SEALANT 4&quot; UP INTERIOR SNAP JOINT</td>
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<tr>
<td>1/4&quot;</td>
<td>DRILL 1/4&quot; DIA. HOLE FOR ROLL PIN</td>
</tr>
<tr>
<td>7/16&quot;</td>
<td>ROLL PIN TYP. #25 (.149) TAP HOLE</td>
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<tr>
<td>11/32&quot;</td>
<td></td>
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<tr>
<td>1 1/4&quot;</td>
<td></td>
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<tr>
<td>2-11/16&quot;</td>
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NOTE:
*SHEAR BLOCK PACKAGES INCLUDE FASTENERS AND ROLL PINS
REFERENCE PAGE 37 FOR USE OF DJ-8 DRILL FIXTURE.
OUTSIDE GLAZED, FRONT SET SCREW SPLINE FRAME ASSEMBLY

FG-3284
"F" (.257 DIA) DRILL TYPICAL

SEALANT EXTERIOR ONLY

TOP OF HORIZONTAL

FG-3283

1-1/4" (TYP)
5/8" (TYP)

1-1/4" (TYP)
11/16" (TYP)

FG-3280

1-3/4"

APPLY SILICONE SEALANT 4" UP INTERIOR SNAP JOINT

APPLY SILICONE SEALANT IN GLAZING REGLET OF VERTICAL WHERE IT MARRIES WITH SEALANT APPLIED TO THE HORIZONTAL

REFERENCE PAGE 39 FOR USE OF DJ-7 DRILL FIXTURE.
OUTSIDE GLAZED, FRONT SET SHEAR BLOCK
FRAME ASSEMBLY

1-3/8" (TYP) (TYP)

1-1/4"

11/16" (TYP)

5/8" (TYP)

TOP OF HORIZONTAL

FG-3284

#11 (.191Ø) TAP HOLE (TYP)

APPLY SILICONE SEALANT 4" UP INTERIOR SNAP JOINT

*FG3000-FP-30 PART# 876

APPLY SILICONE SEALANT IN GLAZING REGLET OF VERTICAL WHERE IT MARRIES WITH SEALANT APPLIED TO THE HORIZONTAL

NOTE:
*SHEAR BLOCK PACKAGES INCLUDE FASTENERS

REFERENCE PAGE 39 FOR USE OF DJ-7 DRILL FIXTURE.
OUTSIDE GLAZED, BACK SET SCREW SPLINE FRAME ASSEMBLY

REFERENCE PAGE 41 FOR USE OF DJ-7 DRILL FIXTURE.
OUTSIDE GLAZED, BACK SET SHEAR BLOCK FRAME ASSEMBLY

APPLY SILICONE SEALANT IN GLAZING REGLET OF VERTICAL WHERE IT MARRIES WITH SEALANT APPLIED TO THE HORIZONTALS

11/16" (TYP)

#11 (.191 Ø) CLEAR HOLE

TOP OF HORIZONTAL

*FG3000-FP-30 PART# 876

NOTE:
*SHEAR BLOCK PACKAGES INCLUDE FASTENERS

REFERENCE PAGE 41 FOR USE OF DJ-7 DRILL FIXTURE.
OUTSIDE GLAZED SYSTEMS
GLAZING GUIDELINES

1) REMOVE GASKETS FROM ROLL AND ALLOW TO RELAX OVERNIGHT. ALL GASKETS TO BE CUT D.L.O. + 1/4" PER FOOT.

2) VERTICAL GASKETS RUN THRU HORIZONTAL GASKETS. HORIZONTAL GASKETS SHOULD BE MITERED ON ENDS AS SHOWN IN DETAIL "A".

3) INSTALL INTERIOR GASKETS PRIOR TO GLAZING. CORNERS OF INTERIOR GASKETS TO BE SET IN SEALANT (DTL."B") AND CORNERS SEALED JUST PRIOR TO SETTING GLASS (DTL."A").
   NOTE: CLEAN GASKETS AND SURFACES WITH ISOPROPYL ALCOHOL PRIOR TO SEALING CORNERS.

4) LOCATE SETTING BLOCKS AT EITHER 1/4 POINTS OR 1/8 POINTS, DEPENDENT ON SIZE OF GLASS.

5) GLASS BITE AT TYPICAL HORIZONTAL & VERTICAL MEMBERS IS 7/16". AT SSG VERTICAL 3/4".

6) GLAZE OPENINGS FROM BOTTOM TO TOP. INSTALL WATER DIVERTERS IN HORIZONTAL ABOVE, AFTER LITE BELOW IS IN POSITION.

7) WATER DIVERTERS (FG1000-FP-2) MUST BE LOCATED ON EACH END OF HORIZONTALS AND SET IN SEALANT.

8) WHEN INSTALLING GLASS: FIRST, WET TOP OF SETTING BLOCK WITH SOAPY WATER. ONCE GLASS IS SET IN PLACE, PUSH GLASS AGAINST INTERIOR GASKET AT SETTING BLOCK AREA. FAILURE TO DO SO MAY CAUSE DIAGONAL CRACKS TOWARDS SETTING BLOCKS DUE TO GLASS BENDING WHILE INSTALLING GASKET(S) IN CORNERS.
FG-1133 PART# 364
VERTICAL GASKETS
RUN THROUGH

FG-3220
PART#: 1122

FG1000-FP-2
PART#: 6887
SET IN PLACE
WITH SEALANT

FG-3144
OUTSIDE GLAZED, FRONT SET
GLAZING DETAIL

FG-1133
PART#: 364
VERTICAL GASKETS
RUN THRU HORIZ GASKETS

HP-17
PART#: 10267

FG1000-FP-2
PART#: 6887
SET IN PLACE
WITH SEALANT

FG-3295
OUTSIDE GLAZED, BACK SET
GLAZING DETAIL

FG-1133
PART#: 364
VERTICAL GASKETS
RUN THRU HORIZ GASKETS

HP-17
PART#: 10267

FG1000-FP-2
PART#: 6887
SET IN PLACE
WITH SEALANT

FG-3290
REFERENCE PAGE 38 FOR USE OF DJ-8 DRILL FIXTURE.
INSIDE GLAZED, CENTER SET
SHEAR BLOCK FRAME ASSEMBLY

NOTE:
* SHEAR BLOCK PACKAGES INCLUDE FASTENERS AND ROLL PINS

REFERENCE PAGE 38 FOR USE OF DJ-8 DRILL FIXTURE.
INSIDE GLAZED, FRONT SET SCREW SPLINE FRAME ASSEMBLY

1-3/4" TYP

FS-8 TYP PART# 10223

1-1/4" TYP

11/16" TYP

TOP OF HORIZONTAL

"F" (0.257 DIA) DRILL TYPICAL

APPLY SILICONE SEALANT 4" UP INTERIOR SNAP JOINT

APPLY SILICONE SEALANT IN GLAZING REGLET OF VERTICAL WHERE IT MARRIES WITH SEALANT APPLIED TO THE HORIZONTAL

REFERENCE PAGE 39 FOR USE OF DJ-7 DRILL FIXTURE.
INSIDE GLAZED, FRONT SET SHEAR BLOCK FRAME ASSEMBLY

NOTE: *SHEAR BLOCK PACKAGES INCLUDE FASTENERS

REFERENCE PAGE 39 FOR USE OF DJ-7 DRILL FIXTURE.
INSIDE GLAZED, FRONT SET
JAMB ASSEMBLY FOR SSG SYSTEM

FG3000-FP-4
BED IN SEALANT

FG-3280

TOP OF HORIZONTAL

1-1/16"

5/8"

1-1/4"

9/16"

FG3000-FP-30
PART # 876

*FG3000-FP-30
PART # 876

FS-9 (TYP.)

APPLY SILICONE SEALANT IN GLAZING REGLET OF VERTICAL WHERE IT MARRIES WITH SEALANT APPLIED TO THE HORIZONTAL

FG3000-PP-56
END DAM. ALIGN WITH GLAZING POCKET OF JAMB AND SEAL TO JAMB AND SILL

1-3/4"

1-1/4"

9/16"

FS-8
PART #: 10223

1-3/4"

1-1/4"

"F" (0.257 DIA) DRILL HEAD & SILL

FG-3436

NOTCH AT HEAD

APPLY SILICONE SEALANT TO END OF HORIZONTALS AND VERTICALS AS SHOWN

FS-8
PART #: 10223

DRILL 5/16" WEEP HOLES LOCATE AT 1/4 POINTS (DO NOT COVER WITH SETTING BLOCK)

NOTE:
*SHEAR BLOCK PACKAGES INCLUDE FASTENERS

REFERENCE PAGE 40 FOR USE OF DJ-7 DRILL FIXTURE.

FG-3293
USE WITH CAPTURED MULLION

FS-55

APPLY SILICONE SEALANT IN GLAZING REGLET OF VERTICAL WHERE IT MARRIES WITH SEALANT APPLIED TO THE HORIZONTAL

FG-3334
USE WITH SSG MULLION

REFERENCE PAGE 40 FOR USE OF DJ-7 DRILL FIXTURE.
INSIDE GLAZED, FRONT SET
SSG MULLION ASSEMBLY

"F" (0.257 DIA) DRILL HEAD & SILL

"FG3000-FP-30" PART# 876

FS-9 (TYP.)

9/16"

1-1/4"

5/8"

#11 (0.191 DIA) TAP HOLE

DRILL 5/16" WEEP HOLES LOCATE AT 1/4 POINTS (DO NOT COVER WITH SETTING BLOCK)

APPLY SILICONE SEALANT TO END OF HORIZONTALS AND VERTICALS AS SHOWN

REFERENCE PAGE 40 FOR USE OF DJ-7 DRILL FIXTURE.
INSIDE GLAZED, FRONT SET, CAPTURED MULLION ASSEMBLY
FOR SSG SYSTEM

"F" (0.257 DIA.) DRILL HEAD & SILL

TOP OF HORIZONTAL

APPLY SILICONE SEALANT IN GLAZING REGLET OF VERTICAL WHERE IT MARRIES WITH SEALANT APPLIED TO THE HORIZONTAL

APPLY SILICONE SEALANT TO END OF HORIZONTALS AND VERTICALS AS SHOWN

MULL CENTERLINE

3/4"

5/8"

9/16"

1-1/16"

1-1/4"

1-1/16"

5/8"

3/4"

REFERENCE PAGE 40 FOR USE OF DJ-7 DRILL FIXTURE.

DRILL 5/16" WEEP HOLES LOCATE AT 1/4 POINTS (DO NOT COVER WITH SETTING BLOCK)
INSIDE GLAZED, BACK SET SCREW SPLINE FRAME ASSEMBLY

APPLY SILICONE SEALANT IN GLAZING REGLET OF VERTICAL WHERE IT MARRIES WITH SEALANT APPLIED TO THE HORIZONTALS

APPLY SILICONE SEALANT TO END OF HORIZONTALS AS SHOWN

REFERENCE PAGE 41 FOR USE OF DJ-7 DRILL FIXTURE.

1-866-OLDCASTLE (653-2278)
Web: www.obe.com
INSIDE GLAZED, BACK SET SHEAR BLOCK FRAME ASSEMBLY

APPLY SILICONE SEALANT IN GLAZING REGLET OF VERTICAL WHERE IT MARRIES WITH SEALANT APPLIED TO THE HORIZONTALS

#11 (.191 Ø) CLEAR HOLE

*FG3000-FP-30
PART# 876

*FG3000-FP-29
PART# 843

APPLY SILICONE SEALANT TO END OF HORIZONTALS AS SHOWN

TOP OF HORIZONTAL

APPLY SILICONE SEALANT 4" UP INTERIOR SNAP JOINT

REFERENCE PAGE 41 FOR USE OF DJ-7 DRILL FIXTURE.

#11 (.191 Ø) DRILL THRU TYP.

*FG3000-FP-31
PART# 878

1-3/8" TYP. #25 TAP HOLE

FS-9 (TYP)

FS-6

FG-3278

FG-3293

HP-17

FS-55

FS-6

FG-3284

FG-3283

FG-3280

FG-3278

APPLY SILICONE SEALANT TO END OF HORIZONTALS AS SHOWN

FS-6
INSIDE GLAZED SYSTEMS
GLAZING GUIDELINES

1) REMOVE GASKETS FROM ROLL AND ALLOW TO RELAX OVERNIGHT. ALL GASKETS TO BE CUT D.L.O. + 1/4" PER FOOT.

2) VERTICAL GASKETS RUN THRU HORIZONTAL GASKETS. HORIZONTAL GASKETS SHOULD BE MITERED ON ENDS AS SHOWN IN DETAIL “A”.

3) INSTALL EXTERIOR GASKETS PRIOR TO GLAZING. CORNERS OF EXTERIOR GASKETS TO BE SET IN SEALANT (DTL.”B”) AND CORNERS SEALED JUST PRIOR TO SETTING GLASS (DTL.”A”). NOTE: CLEAN GASKETS AND SURFACES WITH ISOPROPYL ALCOHOL PRIOR TO SEALING CORNERS.

4) LOCATE SETTING BLOCKS AT EITHER 1/4 POINTS OR 1/8 POINTS, DEPENDENT ON SIZE OF GLASS.

5) GLASS BITE AT TYPICAL HORIZONTAL & VERTICAL MEMBERS IS 7/16". AT SSG VERTICAL 3/4".

6) GLAZE OPENINGS FROM BOTTOM TO TOP. INSTALL WATER DIVERSERS IN HORIZONTAL ABOVE, AFTER LITE BELOW IS IN POSITION.

7) WATER DIVERSERS MUST BE LOCATED ON EACH END OF HORIZONTALS AND SET IN SEALANT.

8) WHEN INSTALLING GLASS: FIRST, WET TOP OF SETTING BLOCK WITH SOAPY WATER. ONCE GLASS IS SET IN PLACE, PUSH GLASS AGAINST GASKET AT SETTING BLOCK AREA. FAILURE TO DO SO MAY CAUSE DIAGONAL CRACKS TOWARDS SETTING BLOCKS DUE TO GLASS BENDING WHILE INSTALLING GASKET(S) IN CORNERS.
INSIDE GLAZED, CENTER SET
GLAZING DETAIL

FG-1133
PART#: 364
VERTICAL GASKETS
RUN THRU.

FG-3221
PART#: 7952

FG-3210

FG1000-FP-4 & 5
PART#: 7971
SET IN PLACE
WITH SEALANT
INSIDE GLAZED, FRONT SET
GLAZING DETAIL

FG-1133
PART#: 364
VERTICAL GASKETS
RUN THRU HORIZ GASKETS

HP-17
PART#: 10267

FG-3290

FG1000-FP-2
PART#: 6887
SET IN PLACE
WITH SEALANT
INSIDE GLAZED, FRONT SET
SSG GLAZING DETAIL

STRUCTURAL SILICONE

3/4" GLASS BITE

HP-30066
CRITICAL NOTE:
SEE DETAIL BELOW

FG-1133

HP-17
PART#: 10267

FG-3335 FACE COVER
CUT EVERY THREE BAYS
OR MAXIMUM LENGTH
OF 20 FEET.

TO REMOVE FACTORY APPLIED
LUBRICANT CLEAN LAST 2" OF
GASKETS AT INTERSECTION WITH
STRUCTURAL SILICONE JOINT
USING ISOPROPYL ALCOHOL

FG3000-PP-53
SEE PAGE 34 FOR
SEALANT INSTRUCTIONS

1/2" (TYP.)

MARRY SEAL AT
GASKET WITH VERTICAL
WEATHER SEAL

RUN HP-1004 BAFFLE FULL
HEIGHT OF FACE COVER
AT SPLICE AND USE
AS BACKER ROD TO
SEAL JOINT.

KEEP END OF
FUNNEL BRIDGE
CLEAR OF SEALANT

1/4"

NOTCH LEG OF GASKET
AT FUNNEL BRIDGE

1/4"
BRIDGE INSTALLATION FOR MULTIPLANE SSG

APPLY SEALANT TO HORIZONTAL AND FACE OF MULLION PRIOR TO INSTALLING BRIDGE.

FG3000-PP-53 FUNNEL BRIDGE (PART# 13664)

FS-202 (#8 X 1/2" PPH)

BED FASTENERS IN SEALANT

SEAL BETWEEN BRIDGE AND HORIZONTAL

INSTALL HP-1004 WEEP BAFFLE INTO BRIDGE PRIOR TO INSTALLING FACE CAP.

KEEP FACE OF BRIDGE CLEAR OF SEALANT FOR WEEPAGE.

TOOL SEALANT AT MULLION AND HORIZONTAL TO FORM WATER TIGHT SEAL
HEAD & SILL SPLICE INSTALLATION
FOR SSG SYSTEM

Bead splices in sealant

Locate splice joint at mid-lite

Seal face of sill and tool sealant

Splice kit for FG-3280 sill is part # 12490. Packaged 20 per box.

Seal top and back of sill and tool sealant

Splice kit for FG-3280 sill is part # 12490. Packaged 20 per box.

Seal back and underside of head and tool sealant

Seal face of head and tool sealant

Splice kit for FG-3436 head is part #13666. Splices packaged 20 per box.

2"

1/2"

2"
INSIDE GLAZED, BACK SET
GLAZING DETAIL

FG-1133
PART#: 364
VERTICAL GASKETS
RUN THRU HORIZ GASKETS

HP-17
PART#: 10267

FG-3295

FG1000-FP-2
PART#: 6887
SET IN PLACE
WITH SEALANT

September 2018
NOTES:
1) DRILL HOLES FOR SCREWSPLINES USING A "F" (.257 Ø) DRILL
2) DRILL HOLES FOR ROLL PINS USING A "F" (.257 Ø) DRILL
3) DRILL HOLES FOR SHEAR BLOCKS USING #11 (.191Ø) DRILL

ALIGN WITH TOP OF MULLION

ALIGN WITH TOP OF HORIZONTAL

ALIGN WITH BOTTOM OF MULLION

ROLL PIN USING AC-119-1 (K)

REFERENCE FRONT SET ASSEMBLY DRAWINGS FOR ADDITIONAL INFORMATION, SEALANT APPLICATION AND EXTRUSIONS.
INSIDE GLAZED, CENTER SET MULLION FABRICATION USING DRILL FIXTURE

ALIGN WITH TOP OF MULLION

ALIGN WITH TOP OF HORIZONTAL

ALIGN WITH BOTTOM OF MULLION

ROLL PIN USING AC-119-1 (C)

ROLL PIN USING AC-119-1 (C)

AC-119-1 (A-J)

AC-119-1

FG-3198 (C-K)

FG-3197 (B-C-K)

FG-3495 (B-C)

FG-3000-FP-62 (G-H)

DJ-8 DRILL FIXTURE

REFERENCE FRONT SET ASSEMBLY DRAWINGS FOR ADDITIONAL INFORMATION, SEALANT APPLICATION AND EXTRUSIONS.

NOTES:
1) DRILL HOLES FOR SCREWSPLINES USING A "F" (.257 Ø) DRILL
2) DRILL HOLES FOR ROLL PINS USING A "F" (.257 Ø) DRILL
3) DRILL HOLES FOR SHEAR BLOCKS USING #11 (.1910) DRILL
FRONT SET MULLION
FABRICATION USING DRILL FIXTURE

ALIGN WITH TOP
OF MULLION

ALIGN WITH TOP
OF HORIZONTAL

ALIGN WITH BOTTOM OF MULLION

REFERENCE FRONT SET ASSEMBLY
DRAWINGS FOR ADDITIONAL
INFORMATION, SEALANT APPLICATION
AND EXTRUSIONS.

NOTES:
1) DRILL ALL HOLES USING #11 (.191") DRILL
2) SHEAR BLOCK CONNECTIONS DRILL WITH
   #11 (.191") DRILL
3) SCREWSPLINE CONNECTIONS DRILL OUT
   HOLES USING "F" (.257") DRILL
NOTES:
1) DRILL MULLION AND SILL USING DJ-7 DRILL Fixture, HEAD EXTRUSION MUST BE HAND LAID OUT AND DRILLED ON ID LINES (SEE PAGE 23 THRU 25).
2) DRILL OUT HOLES IN SILL FOR SCREWSPLINE ASSEMBLY USING "F" (.257Ø) DRILL.

REFERENCE FRONT SET ASSEMBLY DRAWINGS FOR ADDITIONAL INFORMATION, SEALANT APPLICATION AND EXTRUSIONS. REFERENCE PAGE 39 FOR DRILL FIXTURE FOR FG-3437 CAPTURED MULLION.

NOTE: THIS SIDE OUT FOR SSG VERTICALS

NOTE: THIS SIDE OUT FOR RW SILL

SERIES 3000 THERMAL MULTIPLANE INSTALLATION MANUAL

SSG FABRICATION USING DRILL FIXTURE

DJ-7 DRILL FIXTURE

ALIGN WITH TOP OF HORIZONTAL

NOTE: THIS SIDE OUT FOR SSG VERTICALS

FG3000-FP-30 (E-F, C-D Opp.)

REFERENCE PAGE 39 FOR DRILL FIXTURE FOR FG-3437 CAPTURED MULLION.

FG-3280 (G-H Left End, A-B Right End)

FG-3437 / FG-3333 (A-G)

NOTE: THIS SIDE OUT FOR SSG VERTICALS

SERIES 3000 THERMAL MULTIPLANE INSTALLATION MANUAL

September 2018

1-866-OLDCASTLE (653-2278)
Web: www.obe.com
BACK SET MULLION
FABRICATION USING DRILL FIXTURE

ALIGN WITH TOP OF MULLION

FG3000-FP-30 (G-H, A-B Opp.)
FG-3291 (E-F, C-D Opp.)
FG3000-FP-31 (C-D, E-F Opp.)
FG-3296 (A-B, G-H Opp.)
FG-3293 / FG-3294 (G-H, A-B Opp.)

ALIGN WITH TOP OF HORIZONTAL

FG3000-FP-30 (E-F, C-D Opp.)
FG-3280 (G-H, A-B Opp.)

ALIGN WITH BOTTOM OF MULLION

REFERENCE FRONT SET ASSEMBLY DRAWINGS FOR ADDITIONAL INFORMATION, SEALANT APPLICATION AND EXTRUSIONS.

NOTES:
1) DRILL ALL HOLES USING #11 (.191Ø) DRILL
2) SHEAR BLOCK CONNECTIONS DRILL WITH #11 (.191Ø) DRILL
3) SCREWSPLINE CONNECTIONS DRILL OUT HOLES USING "F" (.257Ø) DRILL

DJ-7 DRILL FIXTURE
FG-2122 FILLER
CUT 4" LONG
(SOLD IN STOCK LENGTHS)

FG-2188 PVC FILLER
MAY BE USED TO IMPROVE
INSTALLATION OF
PERIMETER SEALS.
(OPTIONAL)

SILL ANCHORS, LOCATE NO MORE
THAN 4" AWAY FROM EACH SIDE
OF MULLION. ADDITIONAL ANCHORS
MAY BE REQUIRED BASED ON PROJECT
STRUCTURAL REQUIREMENTS.
SEE PAGES 44 & 45 FOR PERIMETER ANCHOR CONDITIONS.

NOTES:
1) WHEN USING OPTIONAL FG-3413 SILL RECEPTOR, SILL ANCHORS ARE NOT REQUIRED.

2) ANCHOR SIZE AND FREQUENCY SHOULD BE DETERMINED BY STRUCTURAL REQUIREMENTS.

3) SILL AND HEAD ANCHORS SHOULD BE LOCATED SO THAT THE ANCHOR IS NOT MORE THAN 4" AWAY FROM EACH SIDE OF MULLION.

4) ASSEMBLY WITHOUT FLASHING IS NOT RECOMMENDED.

5) ASSEMBLY USING A NON-TERMAL OR SHEET METAL FLASHING WILL RESULT IN LOSS OF THERMAL CONTINUITY AND IS NOT RECOMMENDED.

6) DO NOTANCHOR WALL THROUGH VERTICAL LEG OF SUB-SILL.
SILL ANCHORS

FS-6 (2) PER ANCHOR (TYPICAL)

FG3000-FP-15 (PART#: 637)
MAXIMUM END REACTION 600 LBS.

FG3000-FP-61 (PART #35014:)
MAXIMUM END REACTION 400 LBS.

FG-3223 SUB-SILL (STANDARD)

FG3000-FP-27 (PART#: 829)
MAXIMUM END REACTION 350 LBS.

FG3000-FP-27 (PART#: 829)
W/ FG3000-FP-28 ISOLATOR (PART#: 822)
MAXIMUM END REACTION 350 LBS.

FG-3413 SILL RECEPTOR (OPTIONAL)

OPTIONAL SILL, MAY BE USED WITH CENTER, FRONT OR BACK SET SYSTEMS.
NO SILL ANCHOR REQUIRED
MAXIMUM END REACTION 600 LBS.
NOTE: 5/16” WEEP HOLES REQUIRED IN FLASHING (E) AT MID-LITE.

OUTSIDE GLAZED ANCHORAGE AND PERIMETER SEAL

OPTIONAL MO-678/MO-244 HEAD RECEIVER MAXIMUM END REACTION OF 450 LBS.

OPTIONAL FG3000-FP-52 ANCHOR, AVAILABLE FOR CENTER SET SYSTEM ONLY. MAXIMUM END REACTION OF 600LBS.

APPLY SEALANT ALONG LENGTH OF SILL FLASHING AT POINT (A).

WHEN USING OPTIONAL FG-3413 SILL RECEPTOR: ONCE THE WALL IS SECURED, APPLY FILLET SEAL BETWEEN SILL FLASHING AND FRONT OF SILL (B).

THE QUALITY OF THE INSIDE AND OUTSIDE PERIMETER SEALS (C) MAY BE IMPROVED BY USING FG-2188 RIGID PVC FILLER. THE PART MAY BE USED IN FULL LENGTHS OR CUT INTO PIECES. ITS PURPOSE IS TO PROVIDE SUPPORT FOR THE BACKER ROD REGARDLESS OF JOINT SIZE. INTERIOR PERIMETER SEAL AT SILL (D) IS FOR COSMETIC PURPOSES AND IS OPTIONAL.

FG-2122 CUT 4” LONG (SOLD IN STOCK LENGTHS)

OPTIONAL MO-678/MO-244 HEAD RECEPTOR MAXIMUM END REACTION OF 450 LBS.

OPTIONAL FG3000-FP-52 ANCHOR, AVAILABLE FOR CENTER SET SYSTEM ONLY. MAXIMUM END REACTION OF 600LBS.

NOTE: 5/16” WEEP HOLES REQUIRED IN FLASHING (E) AT MID-LITE.

SHOWN WITH OPTIONAL SILL
NOTE: 5/16” WEEP HOLES REQUIRED IN FLASHING (E) AT MID-LITE.

APPLY SEALANT ALONG LENGTH OF SILL FLASHING AT POINT (A).

WHEN USING OPTIONAL FG-3413 SILL RECEPTOR: ONCE THE WALL IS SECURED, APPLY FILLET SEAL BETWEEN SILL FLASHING AND FRONT OF SILL (B).

THE QUALITY OF THE INSIDE AND OUTSIDE PERIMETER SEALS (C) MAY BE IMPROVED BY USING FG-2188 RIGID PVC FILLER. THE PART MAY BE USED IN FULL LENGTHS OR CUT INTO PIECES. ITS PURPOSE IS TO PROVIDE SUPPORT FOR THE BACKER ROD REGARDLESS OF JOINT SIZE. INTERIOR PERIMETER SEAL AT SILL (D) IS FOR COSMETIC PURPOSES AND IS OPTIONAL.

FOR SSG INSTALLATION ONLY. INTERIOR PERIMETER SEALS "C" & "D" ARE FOR COSMETIC PURPOSES AND ARE OPTIONAL.
GLAZING ADAPTOR INSTALLATION

BED ADAPTERS IN CONTINUOUS BEAD OF SEALANT

SEE CHART BELOW FOR CORRECT GASKET AND ADAPTOR FOR SPECIFIC APPLICATIONS

SEAL CORNERS OF ADAPTERS. MARRY ADAPTOR SEAL INTO SEALANT AT CORNER OF GASKETS.

NOTE:
ADAPTERS SHOULD BE INSTALLED ON INTERIOR SIDE OF ALL GLAZING OPTIONS.

<table>
<thead>
<tr>
<th>GLASS</th>
<th>ADAPTOR</th>
<th>GASKETS</th>
<th>GLASS</th>
<th>ADAPTOR</th>
<th>GASKETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/4&quot;</td>
<td>FG-3194</td>
<td>FG-1133 Both Sides</td>
<td>11/16&quot;</td>
<td>FG-3237</td>
<td>FG-1133 &amp; FG-1134</td>
</tr>
<tr>
<td>5/16&quot;</td>
<td>FG-3236</td>
<td>FG-5125 Both Sides</td>
<td>3/4&quot;</td>
<td>FG-3237</td>
<td>FG-1134 Both Sides</td>
</tr>
<tr>
<td>3/8&quot;</td>
<td>FG-3236</td>
<td>FG-1133 &amp; FG-5125</td>
<td>13/16&quot;</td>
<td>N/A</td>
<td>Not Available</td>
</tr>
<tr>
<td>7/16&quot;</td>
<td>FG-3236</td>
<td>FG-1133 Both Sides</td>
<td>7/8&quot;</td>
<td>None</td>
<td>FG-5125 Both Sides</td>
</tr>
<tr>
<td>1/2&quot;</td>
<td>FG-3237</td>
<td>FG-5125 Both Sides</td>
<td>15/16&quot;</td>
<td>None</td>
<td>FG-1133 &amp; FG-5125</td>
</tr>
<tr>
<td>9/16&quot;</td>
<td>FG-3237</td>
<td>FG-1133 &amp; FG-5125</td>
<td>1&quot;</td>
<td>None</td>
<td>FG-1133 Both Sides</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>FG-3237</td>
<td>FG-1133 Both Sides</td>
<td>1 1/16&quot;</td>
<td>None</td>
<td>FG-1133 &amp; FG-1134</td>
</tr>
<tr>
<td>5/8&quot;</td>
<td>NONE</td>
<td>FG-3129 Both Sides</td>
<td>1 1/8&quot;</td>
<td>None</td>
<td>FG-1134 Both Sides</td>
</tr>
</tbody>
</table>
The example below shows installation of the center set system, options for front or back set are also available. Please reference price catalog for specific extrusions and anchors required for your installation. Please note the locations of various seals and insure proper locations of these seals when installing typical runs and expansion sections of each of these systems. These seals are shown in the sub-sill installation and assembly sections of this manual. The sub-sills for these products are designed so that sill anchors may be properly sealed prior to frame installation. The frame is either installed over the hook-in anchors or dropped into the sill receptor. This prevents any additional fasteners from penetrating the sill and potentially causing leaks from under the sill. Be sure to properly cap seal all sill anchors prior to beginning installation of frames.

Multiple units may require the use of an expansion mullion if total run exceeds 24 feet in length. When elevation exceeds the 24 foot limit, locate expansion mullions at a distance of no more than every 20 feet. Locate splice in sub-sill at a distance of no more than every 12 feet. A minimum of 7/16" clearance between the jamb and sill end dam must be provided at each end of units when using expansion mullions. This will allow the minimum 3/8" clearance to move the units side ways so that the second unit may be rotated into position and interlocked into first unit. Once in position units should be centered into opening to provide equal joints at the jambs. OBE recommends the use of the FG-2188 PVC filler in the jambs and head to improve the perimeter seal.
OPTIONAL VERTICALS FOR MULTI-POSITION GLASS
NOTE: WHEN USING ALL CORNER ASSEMBLIES WITH SSG SYSTEM APPLICATIONS, THE CORNER WILL RUN THROUGH. ATTACH USING CONNECTIONS SHOWN IN FABRICATION AND ASSEMBLY SECTION OF THIS MANUAL. SPECIAL SHEAR BLOCK FOR HEAD IS SHOWN IN DETAIL "A" ON THIS PAGE.
DOOR FRAME INSTALLATION

NOTES:
1) USE SHEAR BLOCKS AS SHOWN IN FRAME ASSEMBLY SECTION OF THIS MANUAL TO SECURE HORIZONTALS TO TUBULAR FRAMES.

2) DOOR FRAME IS ANCHORED BY FASTENERS THROUGH THRESHOLD AND DOOR FRAME HEADER.

3) DO NOT FABRICATE STANDARD 2 PIECE POUR & DEBRIDGED FRAME EXTRUSIONS FOR DOOR FRAMES. IF THERMAL FRAME IS REQUIRED, OPTIONAL THERMAL DOOR FRAME FG-3389 OR FG-3444 MAY BE USED IN CONJUNCTION WITH THERMAL DOORS.

### SERIES 3000 MULTIPLANE CENTER SET

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG-3495</td>
<td>Open Back Head / Jamb / Mullion</td>
</tr>
<tr>
<td>FG-3595</td>
<td>Open Back Heavy Mullion</td>
</tr>
<tr>
<td>FG-3328</td>
<td>Expansion Mullion (mates w/ FG-3327)</td>
</tr>
<tr>
<td>FG-3329</td>
<td>Expansion Mullion (mates w/ FG-3326)</td>
</tr>
<tr>
<td>FG-3514</td>
<td>Open Back Filler</td>
</tr>
<tr>
<td>FG-3197</td>
<td>Intermediate Horizontal</td>
</tr>
<tr>
<td>FG-3198</td>
<td>Sill</td>
</tr>
<tr>
<td>FG-3144</td>
<td>Glass Stop for FG-3197, FG-3198 &amp; FG-3320</td>
</tr>
<tr>
<td>FG-3210</td>
<td>Heavy Glass Stop for Inside Glazing</td>
</tr>
</tbody>
</table>

### SERIES 3000 THERMAL FRONT SET

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG-3280</td>
<td>Open Back Jamb &amp; Sill</td>
</tr>
<tr>
<td>FG-3283</td>
<td>Open Back Mullion</td>
</tr>
<tr>
<td>FG-3297</td>
<td>Open Back Heavy Mullion</td>
</tr>
<tr>
<td>FG-3326</td>
<td>Expansion Mullion (mates w/ FG-3327)</td>
</tr>
<tr>
<td>FG-3327</td>
<td>Expansion Mullion (mates w/ FG-3326)</td>
</tr>
<tr>
<td>FG-3284</td>
<td>Open Back Filler (Mullion &amp; Horizontal)</td>
</tr>
<tr>
<td>FG-3296</td>
<td>Outside Glazed Head</td>
</tr>
<tr>
<td>FG-3294</td>
<td>Outside Glazed Horizontal</td>
</tr>
<tr>
<td>FG-3295</td>
<td>Face Stop for FG-3294 &amp; FG-3296</td>
</tr>
<tr>
<td>FG-3291</td>
<td>Inside Glazed Head</td>
</tr>
<tr>
<td>FG-3293</td>
<td>Inside Glazed Horizontal</td>
</tr>
<tr>
<td>FG-3290</td>
<td>Glass Stop for FG-3291 &amp; FG-3293</td>
</tr>
</tbody>
</table>

### SERIES 3000 MULTIPLANE SILL FLASHING

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG-3223</td>
<td>Sub-Sill</td>
</tr>
<tr>
<td>FG-3413</td>
<td>Sill Receptor</td>
</tr>
</tbody>
</table>
### SERIES 3000 THERMAL MULTIPLANE BACK SET

<table>
<thead>
<tr>
<th>Part Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG-3280</td>
<td>Open Back Jamb &amp; Sill</td>
</tr>
<tr>
<td>FG-3283</td>
<td>Open Back Mullion</td>
</tr>
<tr>
<td>FG-3297</td>
<td>Open Back Heavy Mullion</td>
</tr>
<tr>
<td>FG-3326</td>
<td>Expansion Mullion (mates w/ FG-3327)</td>
</tr>
<tr>
<td>FG-3327</td>
<td>Expansion Mullion (mates w/ FG-3326)</td>
</tr>
<tr>
<td>FG-3284</td>
<td>Open Back Filler (Mullion &amp; Horizontal)</td>
</tr>
<tr>
<td>FG-3296</td>
<td>Inside Glazed Head</td>
</tr>
<tr>
<td>FG-3294</td>
<td>Inside Glazed Horizontal</td>
</tr>
<tr>
<td>FG-3295</td>
<td>Face Stop for FG-3294 &amp; FG-3296</td>
</tr>
<tr>
<td>FG-3291</td>
<td>Outside Glazed Head</td>
</tr>
<tr>
<td>FG-3293</td>
<td>Outside Glazed Horizontal</td>
</tr>
<tr>
<td>FG-3290</td>
<td>Glass Stop for FG-3291 &amp; FG-3293</td>
</tr>
</tbody>
</table>

### SERIES 3000 THERMAL MULTIPLANE OPTIONAL VERTICAALS

<table>
<thead>
<tr>
<th>Part Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG-3285</td>
<td>Open Back Mullion - Center Set to Front Set or Back Set</td>
</tr>
<tr>
<td>FG-3286</td>
<td>Open Back Filler for FG-3285</td>
</tr>
<tr>
<td>FG-3281</td>
<td>Open Back Mullion - Front Set to Back Set or Back Set to Front Set</td>
</tr>
<tr>
<td>FG-3282</td>
<td>Open Back Filler for FG-3281</td>
</tr>
</tbody>
</table>

### SERIES 3000 THERMAL MULTIPLANE SSG SYSTEM

<table>
<thead>
<tr>
<th>Part Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>FG-3280</td>
<td>Open Back Jamb &amp; Sill</td>
</tr>
<tr>
<td>FG-3333</td>
<td>SSG Mullion</td>
</tr>
<tr>
<td>FG-3437</td>
<td>Mullion</td>
</tr>
<tr>
<td>FG-3436</td>
<td>Head</td>
</tr>
<tr>
<td>FG-3334</td>
<td>Intermediate Horizontal</td>
</tr>
<tr>
<td>FG-3335</td>
<td>Face Stop for FG-3334</td>
</tr>
<tr>
<td>FG-3290</td>
<td>Glass Stop for FG-3436 &amp; FG-3334</td>
</tr>
</tbody>
</table>
## SERIES 3000 MULTIPLANE AUXILIARY EXTRUSIONS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MO-678</td>
<td>Head Receptor</td>
</tr>
<tr>
<td>MO-244</td>
<td>Receptor Face</td>
</tr>
<tr>
<td>FG-3320</td>
<td>4-13/16&quot; High Sidelight Base (mates w/ FG-3331)</td>
</tr>
<tr>
<td>FG-3331</td>
<td>4-5/8&quot; High Sidelight Base (mates w/ FG-3332)</td>
</tr>
<tr>
<td>FG-3332</td>
<td>4-5/8&quot; High Sidelight Base (mates w/ FG-3331)</td>
</tr>
<tr>
<td>FG-3214</td>
<td>Center Set 90° Corner</td>
</tr>
<tr>
<td>FG-3215</td>
<td>Center Set 90° Corner (Self-Mating 180°)</td>
</tr>
<tr>
<td>FG-3301</td>
<td>Front Set Outside 90°, Back Set Inside 90° Corner</td>
</tr>
<tr>
<td>FG-3302</td>
<td>Front Set Outside 90°, Back Set Inside 90° Corner (Mates w/ FG-3301)</td>
</tr>
<tr>
<td>FG-3306</td>
<td>Front Set Inside 90°, Back Set Outside 90° Corner (2 per corner)</td>
</tr>
<tr>
<td>FG-3307</td>
<td>90° Corner mates w/ FG-3306 (2 per corner)</td>
</tr>
<tr>
<td>FG-3322</td>
<td>Center Set 135° Corner</td>
</tr>
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## SERIES 3000 MULTIPLANE AUXILIARY EXTRUSIONS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>FG-3321</td>
<td>Center Set 135° Corner Filler (2 per corner)</td>
</tr>
<tr>
<td>FG-3304</td>
<td>135° Corner mates w/ FG-3303</td>
</tr>
<tr>
<td>FG-3305</td>
<td>135° Filler for FG-3303/FG-3304</td>
</tr>
<tr>
<td>FG-3300</td>
<td>Front Set 135° Outside, Back Set Inside 135° Corner (2 per corner)</td>
</tr>
<tr>
<td>FG-3303</td>
<td>Front Set 135° Inside, Back Set Outside 135° Corner (2 per corner)</td>
</tr>
<tr>
<td>FG-2122</td>
<td>Open Back Filler</td>
</tr>
<tr>
<td>FG-2188</td>
<td>Vinyl Filler for Caulk Stop 12' lg.</td>
</tr>
<tr>
<td>FG-3126</td>
<td>Pocket Filler</td>
</tr>
<tr>
<td>FG-3218</td>
<td>Vinyl Pocket Filler for Window Applications 12' lg.</td>
</tr>
<tr>
<td>FG-3194</td>
<td>Glazing Adaptor for 1/4&quot; glass Use with mullions only</td>
</tr>
<tr>
<td>FG-3237</td>
<td>Glazing Adaptor for 1/2&quot;, 9/16&quot;, 5/8&quot;, 11/16&quot; &amp; 3/4&quot; Use with mullions only</td>
</tr>
<tr>
<td>FG-3236</td>
<td>Glazing Adaptor for 5/16&quot;, 3/8&quot; &amp; 7/16&quot; Use with mullions only</td>
</tr>
<tr>
<td>SERIES 3000 MULTIPLANE AUXILIARY EXTRUSIONS</td>
<td>SERIES 3000 MULTIPLANE ACCESSORIES</td>
</tr>
<tr>
<td>-------------------------------------------</td>
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<tr>
<td>FG-3594 Glazing Adaptor for 1/4&quot; glass</td>
<td>FG3000-FP-29 Shear Block for FG-3280</td>
</tr>
<tr>
<td>Use with FG-3514 filler</td>
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<tr>
<td>FG-3536 Glazing Adaptor for 5/16&quot;, 3/8&quot; &amp; 7/16&quot; Use with FG-3514 filler</td>
<td>FG3000-FP-56 End Dam for FG-3280 Sill for SSG System</td>
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<tr>
<td></td>
<td>FG3000-FP-31 Shear Block for FG-3296</td>
</tr>
<tr>
<td></td>
<td>FG3000-FP-55 Shear Block for FG-3436 Head at Corners</td>
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<tr>
<td></td>
<td>FG3000-FP-61 Anchor for FG-3223 Inside Glazed Center Set</td>
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<td></td>
<td>FG3000-FP-15 Anchor for FG-3223 Outside Glazed Center Set</td>
</tr>
<tr>
<td></td>
<td>FG3000-FP-27 Anchor for FG-3223 Front or Back Set</td>
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<tr>
<td></td>
<td>FG3000-FP-28 Sill Anchor Isolator for Back Set Only (mates with FG3000-FP-27)</td>
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<tr>
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<td>FG3000-FP-32 Anchor for FG-3223 use w/ FG-3332 Sidelight Base</td>
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<td></td>
<td>FG3000-FP-52 Anchor for FG-3231 Head</td>
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<tr>
<td>FG1000-FP-2 Water Diverter for Center Set Outside Glazed &amp; all Front Set or Back Set</td>
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<tr>
<td>FG1000-FP-4/5 Water Diverter for Center Set Inside Glazed</td>
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<tr>
<td>FG3000-FP-9/10 Splice for FG-3223</td>
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<tr>
<td>FG3000-FP-4 End Dam for FG-3223</td>
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<tr>
<td>FG3000-FP-47 Splice for FG-3413</td>
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<tr>
<td>FG3000-FP-78 End Dam for FG-3413</td>
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<tr>
<td>FG3000-FP-62 Shear Block for FG-3495</td>
<td></td>
</tr>
<tr>
<td>AC-119-1 Shear Block for FG-3197 &amp; FG-3198</td>
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SERIES 3000 THERMAL MULTIPLANE INSTALLATION MANUAL

September 2018

1-866-OLDCASTLE (653-2278)
Web: www.obe.com
## Parts List

### Series 3000 Multiplane Accessories

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<tr>
<th>Item</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>FG3000-FP-53</td>
<td>Funnel Bridge for FG-3334</td>
</tr>
<tr>
<td>FG3000-FP-41/54</td>
<td>Splices for FG-3436 Head</td>
</tr>
<tr>
<td>FG3000-FP-38/39</td>
<td>Splices for FG-3280 Sill</td>
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### Series 3000 Multiplane Accessories

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
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<tbody>
<tr>
<td>#10 X 3/4&quot; P.P.H. Attachment of Sill to Sill Anchor &amp; Shear Blocks</td>
<td>FS-6</td>
</tr>
<tr>
<td>#10 X 3/4&quot; P.F.H. Attachment of Shear Blocks</td>
<td>FS-7</td>
</tr>
<tr>
<td>#14 X 1&quot; H.H.S.T.S. Assembly Screw</td>
<td>FS-8</td>
</tr>
<tr>
<td>#10 x 1/2&quot; P.R.H. Attachment of Shear Blocks at Horizontals</td>
<td>FS-55</td>
</tr>
<tr>
<td>#8 x 1/2&quot; P.P.H. Attachment of FG3000-FP-53 Bridge</td>
<td>FS-202</td>
</tr>
<tr>
<td>Drill Fixture for Front or Back Set Shear Block or Screwspline Assembly</td>
<td>DJ-7</td>
</tr>
<tr>
<td>Drill Fixture for Center Set Shear Block or Screwspline Assembly</td>
<td>DJ-8</td>
</tr>
<tr>
<td>.17 x 5/8&quot; DRIVE PIN Attachment of End Dam to FG-3413 Sub Sill</td>
<td>FS-320</td>
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### Series 3000 Multiplane Accessories Gaskets & Setting Blocks

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<thead>
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<th>Description</th>
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<tbody>
<tr>
<td>FG-1133</td>
<td>1&quot; Glazing Gasket</td>
</tr>
<tr>
<td>FG-1134</td>
<td>Light Gasket</td>
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<tr>
<td>FG-3129</td>
<td>5/8&quot; Glazing Gasket</td>
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<tr>
<td>FG-5125</td>
<td>Heavy Gasket</td>
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<tr>
<td>HP-30066</td>
<td>Spacer Gasket for SSG Mullion</td>
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<tr>
<td>CW-998</td>
<td>Gasket for Expansion Mullions</td>
</tr>
<tr>
<td>V-11</td>
<td>Gasket for Head Receptor</td>
</tr>
<tr>
<td>FG-3220</td>
<td>Setting Block for FG-3197, FG-3198 &amp; FG-3231</td>
</tr>
<tr>
<td>FG-3221</td>
<td>Setting Block for FG-3197 Inside Glazed</td>
</tr>
<tr>
<td>FG-3278</td>
<td>Setting Block for FG-3280</td>
</tr>
<tr>
<td>HP-17</td>
<td>Setting Block for FG-3293, FG-3294 &amp; FG-3334</td>
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<tr>
<td>HP-1004</td>
<td>Weep Baffle</td>
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