

CWWM CUSTOM REPLACEMENT SASH — STANDARD DETAILS: HOW TO READ THIS SET, THE CLASS TABLE, THE PACKAGES

Five sheets, with a separate order form and product data sheet. Everything on the sheets is the standard; anything not shown is custom, by note on the order form. Sections are drawn on the 1-3/4" class at full size.

DOUBLE-HUNG SET

32 x 60 SHOWN, FROM INSIDE

CASEMENT (AWNING, HOPPER, FIXED: SAME MEMBERS)

24 x 48 SHOWN, FROM INSIDE. HARDWARE BY THE INSTALLER, NOT DRAWN

CLASS TABLE — THE ONE PLACE THESE NUMBERS LIVE

MEMBER OR RULE	1-3/8" CLASS	1-3/4" CLASS	2" CLASS
Sash thickness	1-3/8"	1-3/4"	2"
Stiles and top rail: stock / sightline	2-1/8" / 1-3/4"	2-3/8" / 2"	2-3/4" / 2-3/8"
Check rails (double-hung): stock / sightline; 1/2" thicker than the sash	1-1/2" / 1-1/8"	1-11/16" / 1-5/16"	1-3/4" / 1-3/8"
Bottom rail, double-hung: stock / sightline	3-3/8" / 3"	4-1/8" / 3-3/4"	4-5/8" / 4-1/4"
Bottom rail, casement, awning, hopper	3-3/8" / 3"	3-1/4" / 2-7/8"	3-7/8" / 3-1/2"
Bottom rail, fixed sash	3-1/8" / 2-3/4"	3-1/4" / 2-7/8"	3-7/8" / 3-1/2"
Hinge stile with parliament hinges	2-1/2" / 2-1/8"	2-5/8" / 2-1/4"	2-3/4" / 2-3/8"
Muntin width	7/8"	1-1/4"	1-1/4"
Profile envelope: width / depth (ogee standard)	3/8" / 1/2"	3/8" / 5/8"	3/8" / 5/8"
Glazing: VIG unit / IGU unit	8 mm / 1/2"	10 mm / 5/8"	10 mm / 5/8"
Sill bevel, bottom rails	10°	10°	10°
Horn option, when selected	2"	2"	2"

Stock = full member width. Sightline = the flat face, from the sash edge to where the profile starts inside, or to the putty line outside. Class by the existing sash thickness.

HOW TO READ THIS SET

Clear vertical-grain Douglas fir; closed mortise-and-tenon corners, pinned; primed; weatherstripped in the sash edge. The sash reproduce the configuration, member widths, interior profile and exterior putty-line appearance of the existing sash from the items on the order form, so they are suitable for work reviewed under the Secretary of the Interior's Standards.

PROFILE means the moulded shape on the inside edge, next to the glass. Ogee is standard; ovolo and bevel are in the library (A203). Only the interior profile is a match item; outside, every package reads as a putty line.

Every section is drawn on the 1-3/4" class at full size, exterior left, so a print at 100% is a template. Other classes use the same cuts with the table above.

Frame, stops, parting bead, sill, balances and hardware are existing or by others and are drawn dashed. The sash is what CWWM makes: primed, glazed, weatherstripped, with the rope groove cut.

GLAZING PACKAGES

ORIGINAL: 1/8" single pane, face-puttied; true divided lites at the class muntin.

VIG: vacuum unit in the Original pocket, face-puttied; 8 mm on 1-3/8", 10 mm on 1-3/4" and 2". A small metal cap sits near one corner on the room side; the corner is chosen on the order form.

IGU: 5/8" insulating unit behind a bevel stop on 1-3/4" and 2"; 1/2" unit with a conversion bead on 1-3/8". All three packages on every class; divided-lite rules on A203.

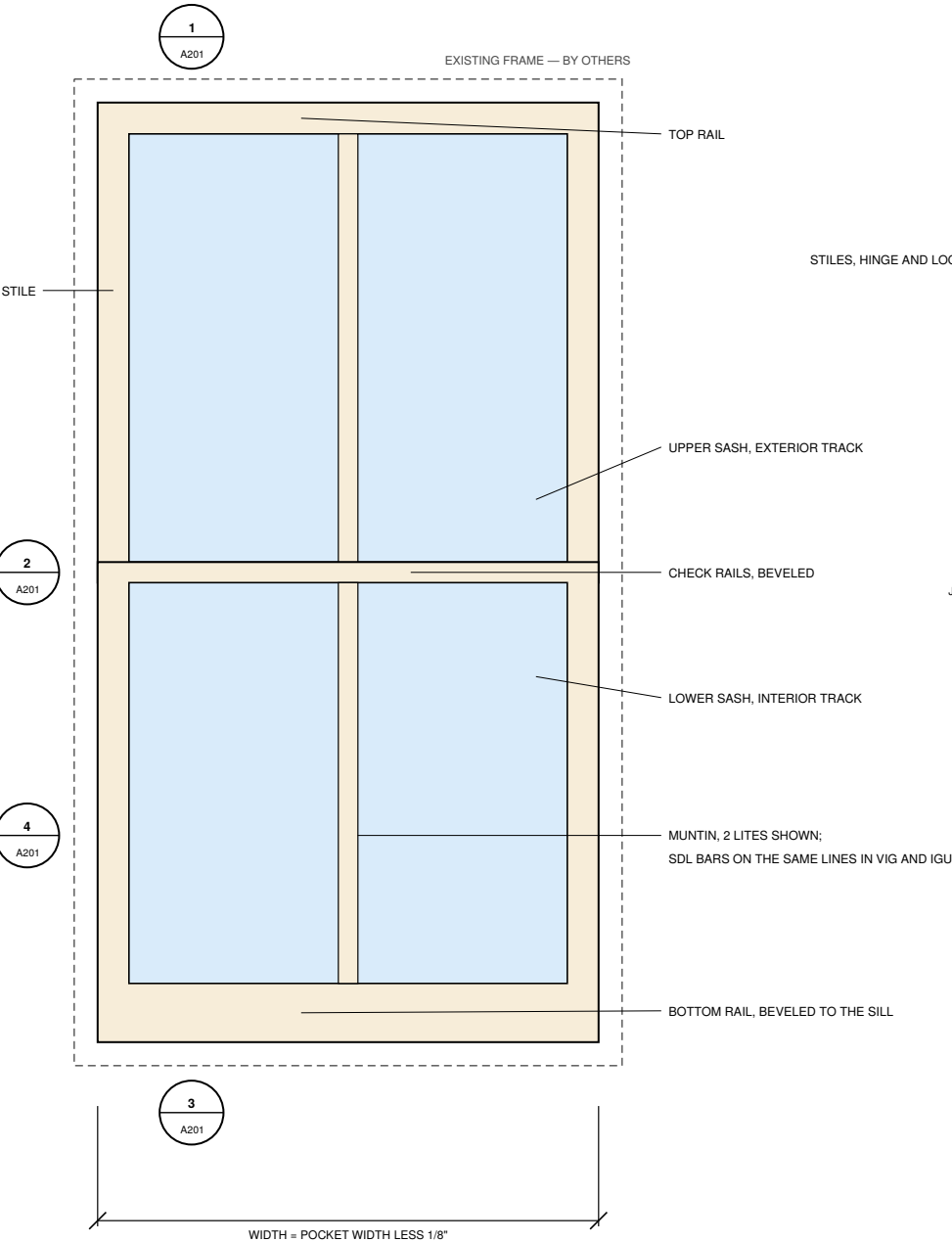
SHEET INDEX

A200	Overview: elevations, class table, how to read the set
A201	Double-hung sash: head, meeting rails, sill, jamb
A202	Casement, awning, hopper, fixed: head and jambs, sill
A203	Profiles (ogee, ovolo, bevel) and glazing packages (Original, VIG, IGU); SDL bars
A204	Joinery and horns
FORM	Order form: the match-existing items, one sheet per order; separate document
DATA	Product data: materials, finish, fit and tolerances, glazing and weatherstrip; separate document

CLASSES AND SIZES

Three thickness classes, chosen by the existing sash: 1-3/8", 1-3/4", 2". Another thickness is custom, by note.

Sash only. Sizes from the measurement sheet; width 1/8" under the pocket, height per the form; horns excluded from the height.



1 DOUBLE-HUNG SET, ELEVATION
1" = 1'-0"

2 CASEMENT, ELEVATION
1" = 1'-0"

KEY

New sash, VG fir, in section

Glass

Putty

Existing frame, stops, bead, sill — by others

EXT. = exterior face, always left. INT. = interior face, always right. Sections at full size: a print at 100% is a template.

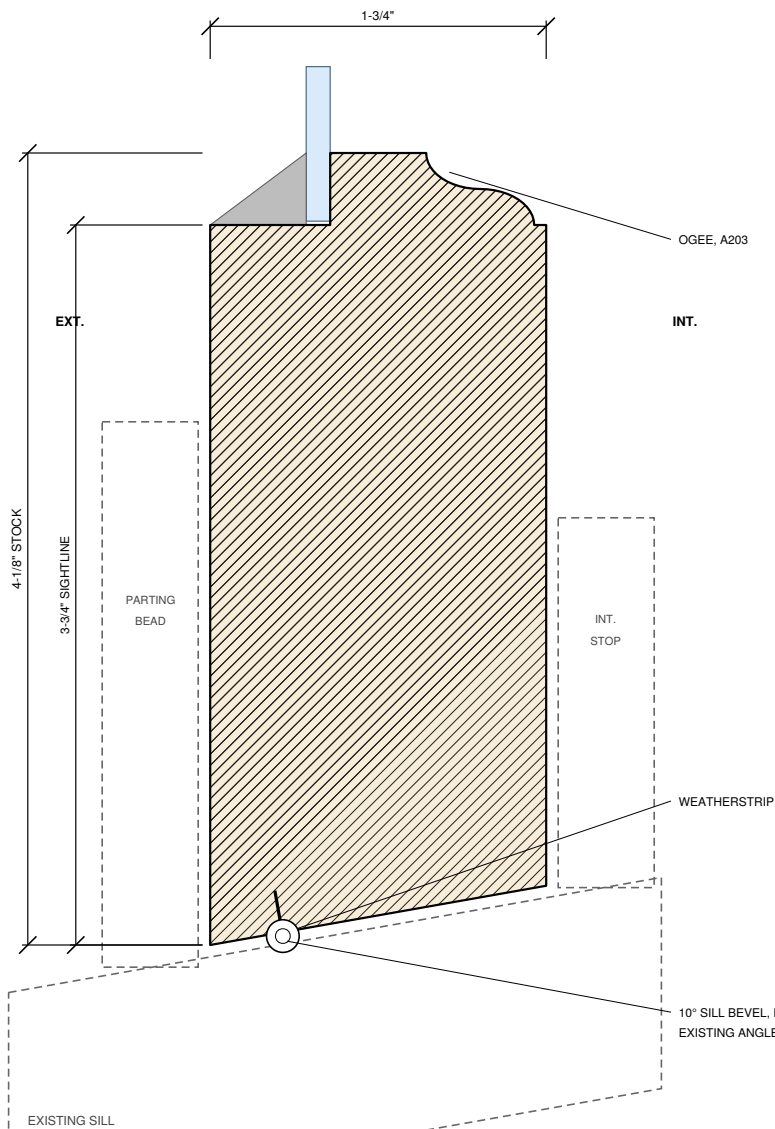
No.	Description	Date
0	Issued	09/17/2026
1	Shop review: edge weatherstrip; beveled casement rail	10/07/2026

OVERVIEW, CLASS TABLE, SHEET INDEX

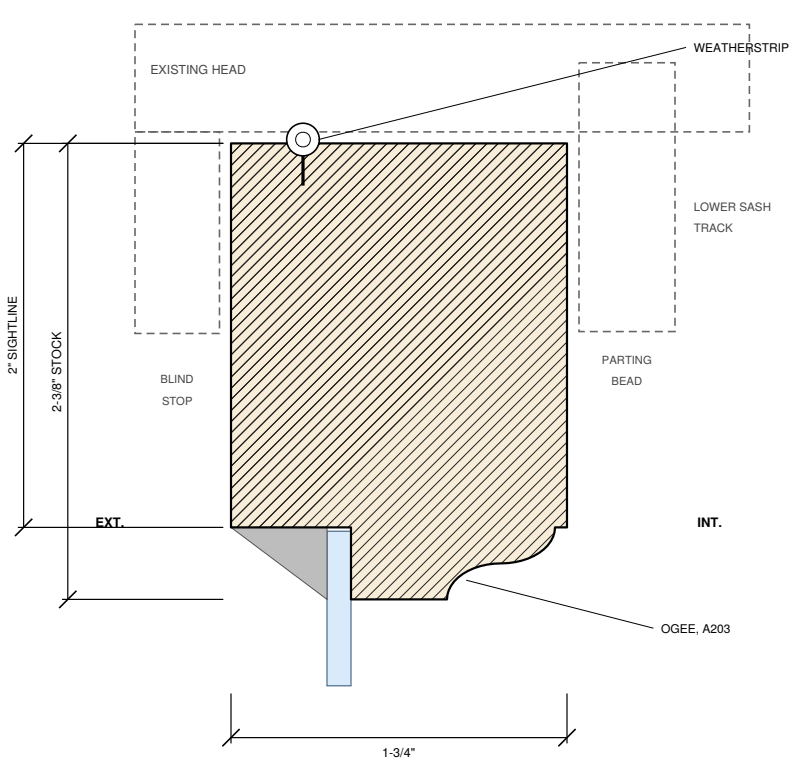
Project number CWWM-SASH-STD
Date 10/07/2026
Drawn by NF
Scale AS NOTED

DOUBLE-HUNG SASH — SECTIONS AT FULL SIZE, 1-3/4" CLASS DRAWN; OTHER CLASSES PER THE TABLE ON A200

Section markers on the A200 elevation. Exterior left on every cut. Frame, stops, parting bead and sill are existing and shown dashed; the sash is what CWWM makes.



3 SILL — LOWER SASH BOTTOM RAIL
12" = 1'-0" (FULL SIZE)



1 HEAD — UPPER SASH TOP RAIL
12" = 1'-0" (FULL SIZE)

WEATHERSTRIP AND HARDWARE

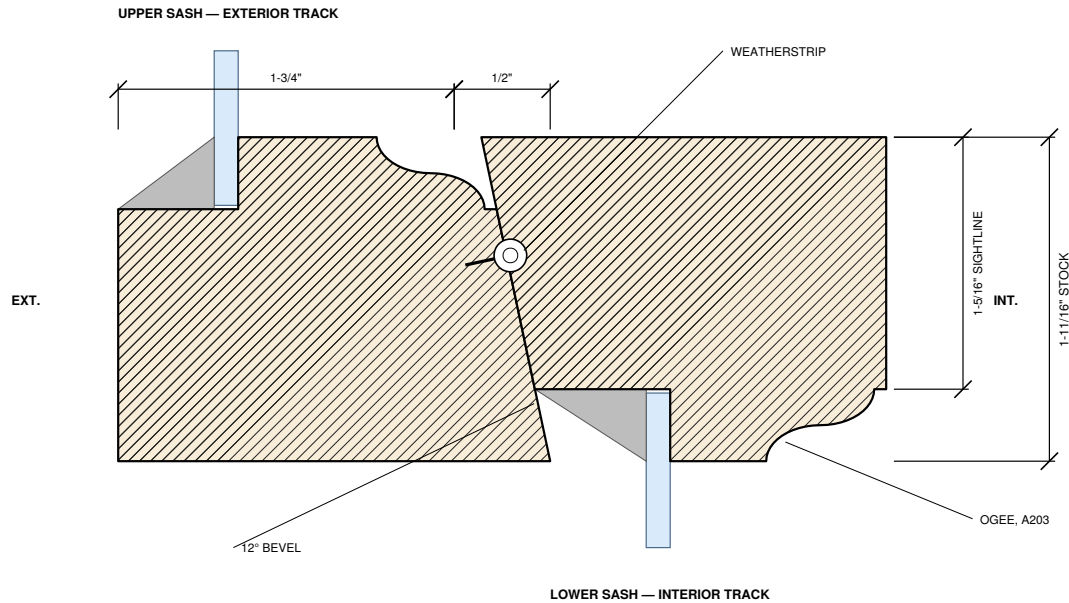
WEATHERSTRIP: every operating sash is weatherstripped at the shop at the head, the sill and the meeting rail with replaceable bulb seals, silicone or TPE, set 3/8" in from the exterior face. The jamb seal is at the frame, by the installer; strips in the stile edges are available on request.

HARDWARE: sash lock, keeper, lifts, pulleys and chains by the installer. No hardware prep on the sash. Rope groove: A204.

GENERAL

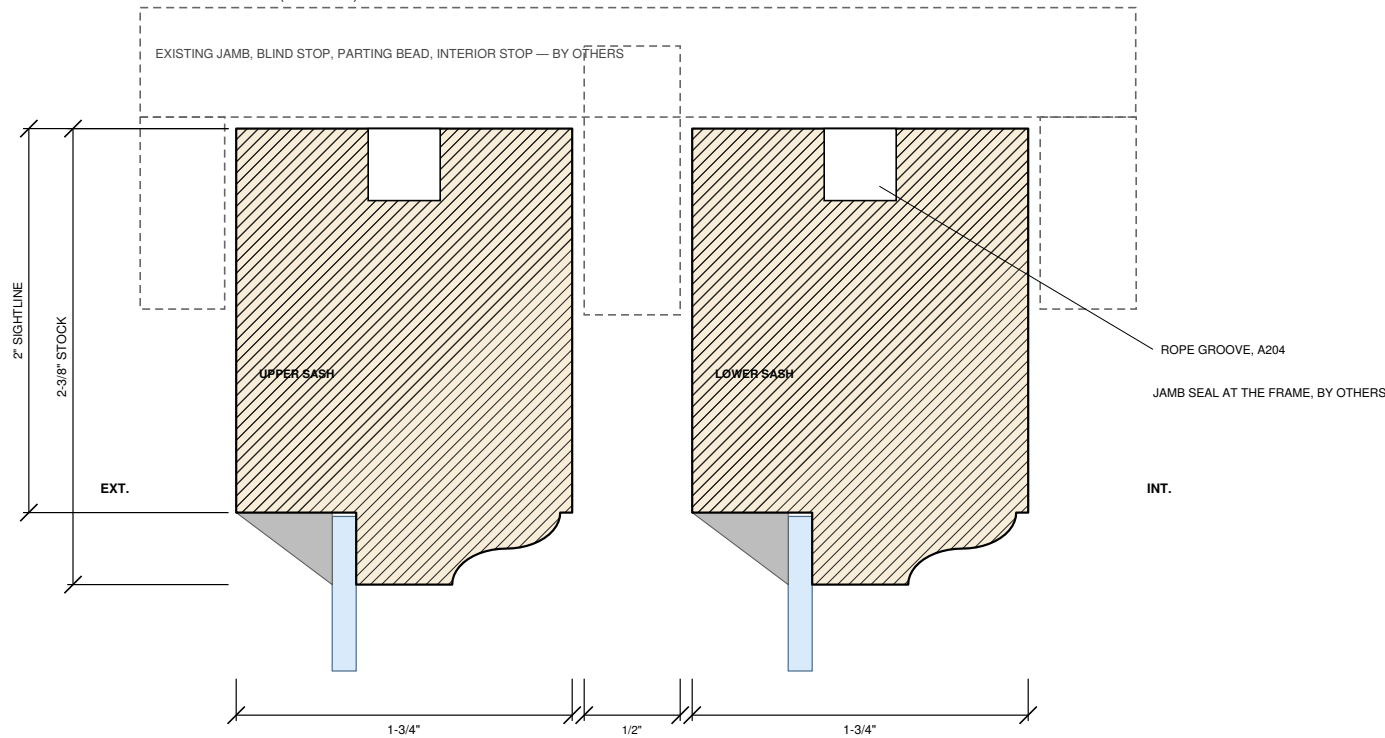
The 1-3/4" class is drawn. 1-3/8" and 2" sash follow the same cuts with the class numbers on A200; the parting-bead zone is 1/2" on every class.

Check rails are 1/2" thicker than the sash; the meeting faces are beveled 12°.



SASH LOCK AND KEEPER BY THE INSTALLER, NO PREP.

2 MEETING RAILS — CHECK RAILS, BEVELED 12°
12" = 1'-0" (FULL SIZE)



4 JAMB, PLAN — BOTH STILES
12" = 1'-0" (FULL SIZE)

KEY

 New sash, VG fir, in section  Glass  Putty  Existing frame, stops, bead, sill — by others

EXT. = exterior face, always left. INT. = interior face, always right. Sections at full size: a print at 100% is a template.

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CWWM CUSTOM REPLACEMENT SASH
STANDARD DETAILS

No.	Description	Date
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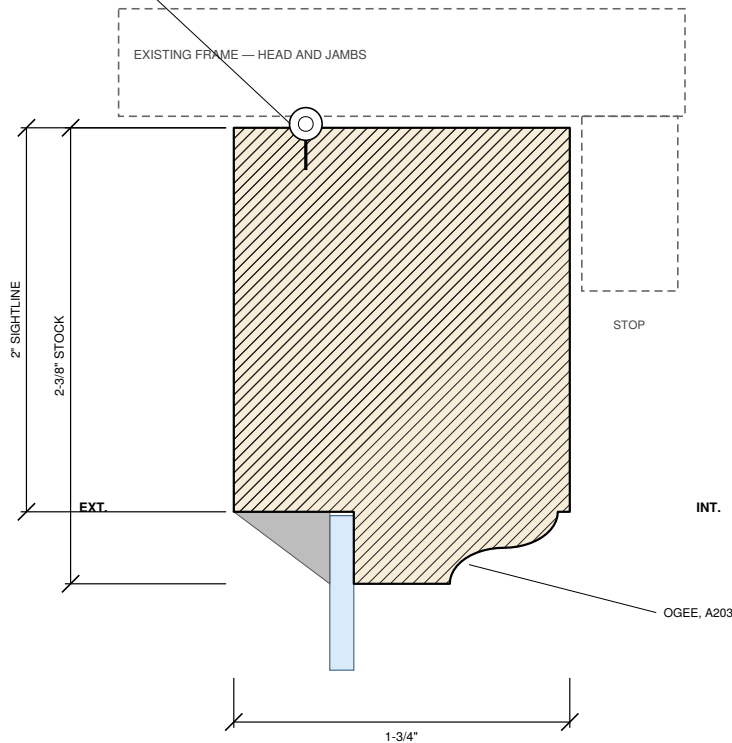
DOUBLE-HUNG SASH — SECTIONS

Project number CWWM-SASH-STD
Date 10/07/2026
Drawn by NF
Scale 12" = 1'-0" (FULL SIZE)

A201

CASEMENT, AWNING, HOPPER AND FIXED SASH — SECTIONS AT FULL SIZE, 1-3/4" CLASS DRAWN

On swing sashes, the head and jamb cut is the same on every hinged sash; the seal sits in the sash edge all round, 3/8" from the exterior face. Exterior left on every cut.



1 HEAD, AND JAMBS — ONE CUT; HINGE AND LOCK STILES ALIKE

12" = 1'-0" (FULL SIZE)

GENERAL

The 1-3/4" class is drawn: stiles and top rail 2-3/8" stock / 2" sightline; bottom rail 3-1/4" / 2-7/8". Other classes per the table on A200.

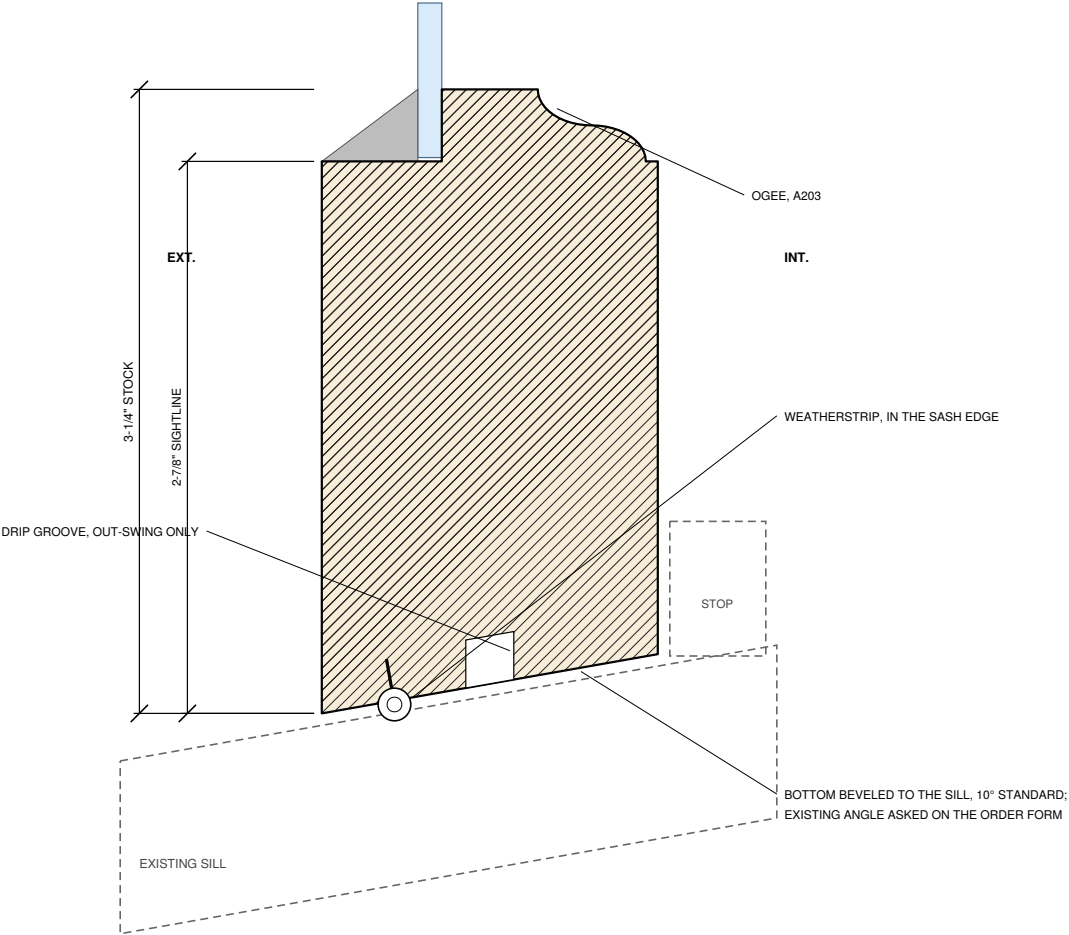
Hinge and lock stiles are the same width. With parliament (projection) hinges the hinge stile is wider; see the table on A200 and ask on the order form.

Hardware and hinge mortises by the installer, at the existing frame's hinge locations. No hardware prep on the sash.

In-swing casement and hopper: the same sash, with the frame stop on the exterior face; no drip groove, and a hook over the sill lip is custom, by note. Hopper is hinged at the bottom rail. Swing and hand on the order form.

Fixed sash: same members, no seal, no hardware; bottom rail per the table on A200. French pairs with an astragal at the meeting stiles: custom, by note.

Frame-side weatherstrip and stops by others.



2 SILL — OUT-SWING CASEMENT AND AWNING (STANDARD)

12" = 1'-0" (FULL SIZE)

WEATHERSTRIP

WEATHERSTRIP: a replaceable silicone or TPE bulb seal in the sash edge on all four sides, 3/8" in from the exterior face, closing against the frame rabbet. Fixed: none.

DRIP GROOVE: out-swing bottom rails only, in the beveled underside.

KEY

New sash, VG fir, in section

Glass

Putty

Existing frame, stops, bead, sill — by others

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CASEMENT, AWNING, HOPPER, FIXED — SECTIONS

Project number CWWM-SASH-STD

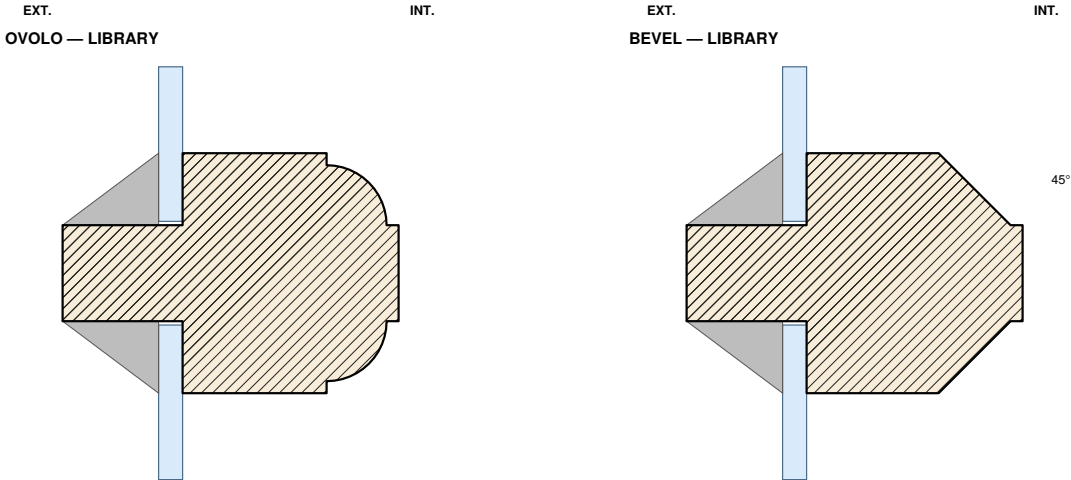
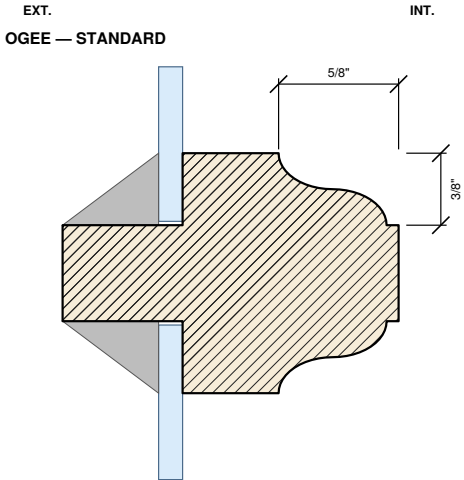
Date 10/07/2026

Drawn by NF

Scale 12" = 1'-0" (FULL SIZE)

PROFILES AND GLAZING PACKAGES — OGEE STANDARD; OVOLO AND BEVEL IN THE LIBRARY; ORIGINAL, VIG, IGU

Row 1: the three profiles on the 1-3/4" class muntin. Row 2: the three glazing packages and the SDL bars. Full size, exterior left.



NOTES

1. Only the INTERIOR profile is a match item. Outside, every package reads as a putty line: putty on Original and VIG; on IGU a bevel stop on 1-3/4" and 2", a conversion bead on 1-3/8".
2. DIVIDED LITES. Original: true divided at the class muntin. VIG: one unit with SDL bars on 1-3/8"; true divided on 1-3/4" and 2" where every lite is at least 12" x 18", otherwise one unit with bars. IGU: SDL bars standard; true divided on request on 1-3/4" and 2". Bars sit on the true-divided lines, profiled inside, putty-line outside, dark spacer between the panes on IGU.
3. VIG units carry a small metal cap near one corner on the room side; the corner is chosen on the order form.

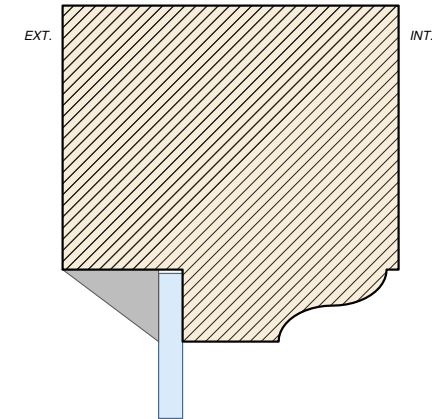
PROFILE ENVELOPE 3/8" WIDE x 5/8" DEEP, EVERY MEMBER (1-3/8" CLASS: 3/8" x 1/2").
THE CURVE INSIDE IT IS CWWM'S CUTTER, AS DRAWN.

1 OGEE — STANDARD — 1-3/4" CLASS MUNTIN
12" = 1'-0" (FULL SIZE)

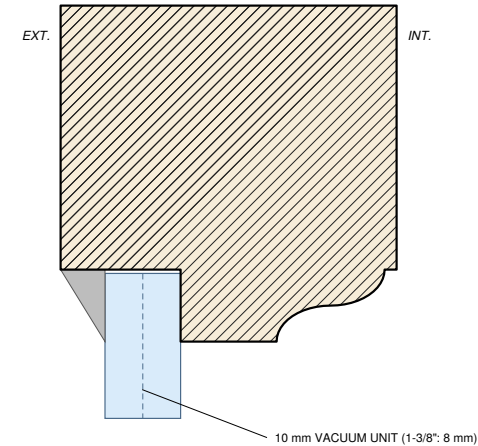
2 OVOLO — LIBRARY — 1-3/4" CLASS MUNTIN
12" = 1'-0" (FULL SIZE)

3 BEVEL — LIBRARY — 1-3/4" CLASS MUNTIN
12" = 1'-0" (FULL SIZE)

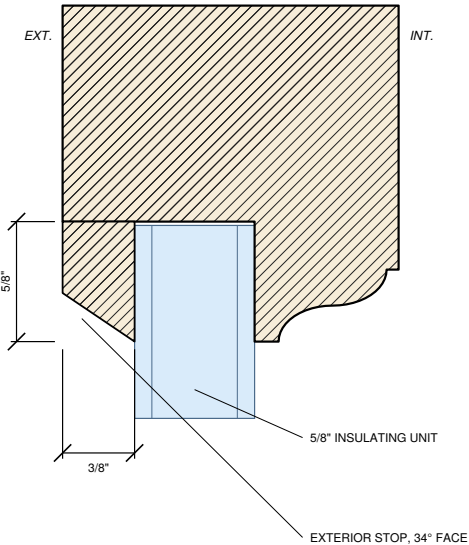
ORIGINAL — SINGLE PANE, PUTTY



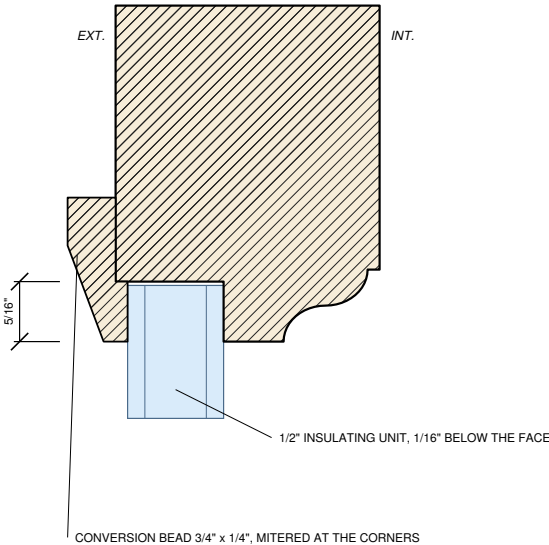
VIG — IN THE ORIGINAL POCKET



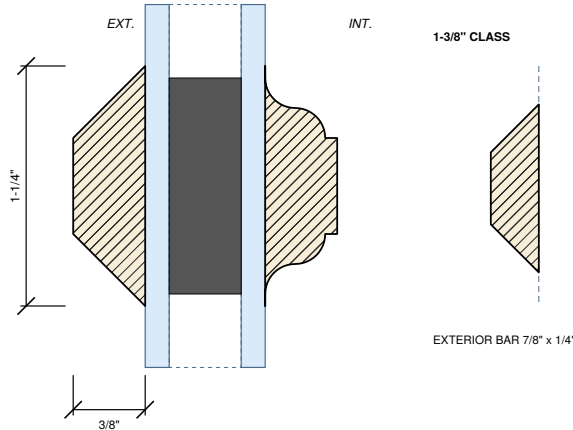
IGU — 1-3/4" AND 2": 5/8" UNIT, 3/8" STOP



IGU — 1-3/8": 1/2" UNIT, CONVERSION BEAD



SDL BARS — 1-3/4" CLASS IGU SHOWN



BARS 3/8" THICK ON THE GLASS, ON THE TRUE-DIVIDED LINES OF THE CLASS:
PUTTY-LINE BAR OUTSIDE, PROFILED BAR INSIDE. DARK SPACER BETWEEN THE PANES.
1-3/8" CLASS: 7/8" BARS (RIGHT). 2" CLASS: AS 1-3/4".

4 ORIGINAL — SINGLE PANE, PUTTY
12" = 1'-0" (FULL SIZE)

5 VIG — IN THE ORIGINAL POCKET
12" = 1'-0" (FULL SIZE)

6 IGU — 1-3/4" AND 2": 5/8" UNIT, 3/8" STOP
12" = 1'-0" (FULL SIZE)

7 IGU — 1-3/8": 1/2" UNIT, CONVERSION BEAD
12" = 1'-0" (FULL SIZE)

8 SDL BARS — SECTION AT A BAR
12" = 1'-0" (FULL SIZE)

KEY

	New sash, VG fir, in section		Glass		Putty		Existing frame, stops, bead, sill — by others
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PROFILES AND GLAZING PACKAGES

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Drawn by NF
Scale 12" = 1'-0" (FULL SIZE)

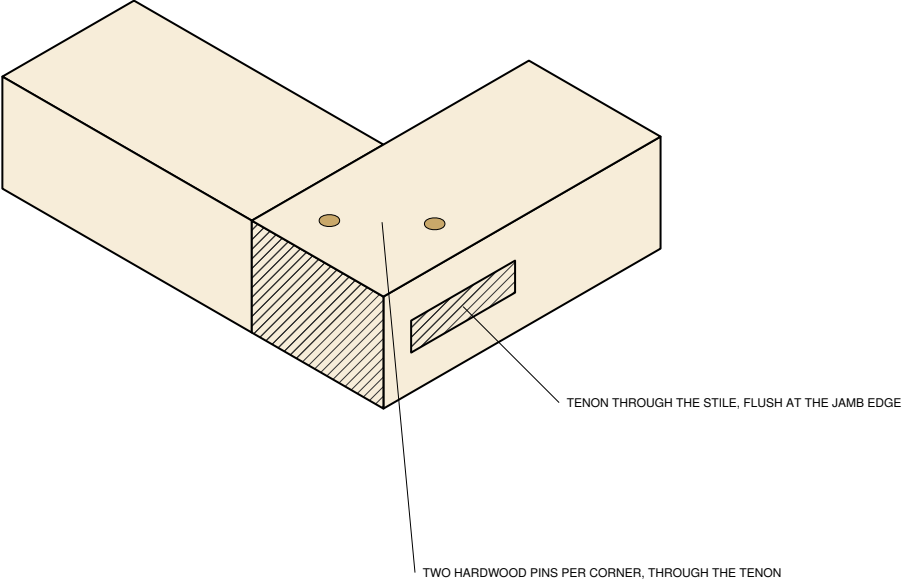
A203

JOINERY — CLOSED THROUGH-MORTISE AND TENON, PINNED; HORNS. 1-3/4" CLASS

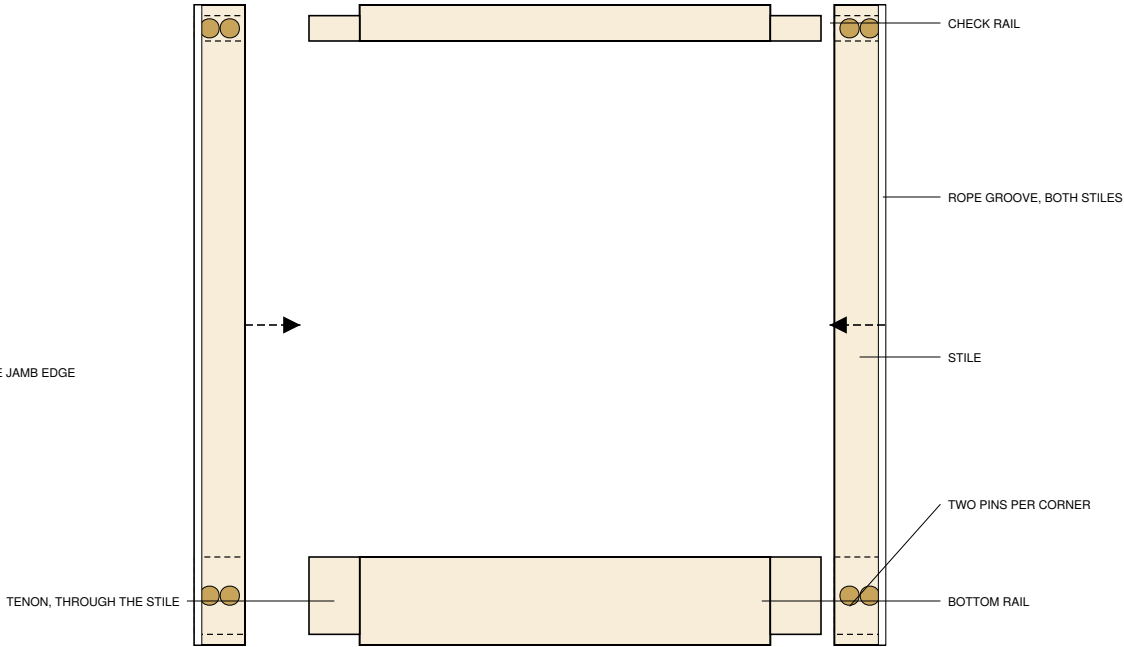
Corner and horns drawn isometric with the sash lying flat, interior face up. Exploded sash drawn face-on from inside.

ASSEMBLED CORNER

CLOSED THROUGH-MORTISE AND TENON, GLUED AND PINNED. STILE END SOLID AND FLUSH WITH THE RAIL.



LOWER SASH, EXPLODED — 24 x 30 SHOWN, FROM INSIDE



NOTES

JOINT: closed through-mortise and tenon at every corner of every sash, glued and pinned with two hardwood dowels. The tenon runs through the stile and is trimmed flush at the jamb edge; the stile end stays solid. No wedges.

MUNTINS: stuck with the class profile, coped to the stile and rail profiles, tenoned into the rails, half-lapped at every crossing. The profile runs continuous through every joint.

ROPE GROOVE: on both stiles of every double-hung sash. Chain uses the same groove. Balances by others; a balance mortise is custom, by note.

HORNS: square or ogee when selected on the order form; the horn is not included in the sash height.

1 STILE / RAIL CORNER — ASSEMBLED

4" = 1'-0" (ISOMETRIC)

2 DOUBLE-HUNG LOWER SASH — EXPLODED

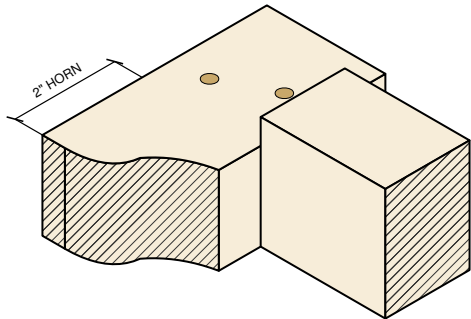
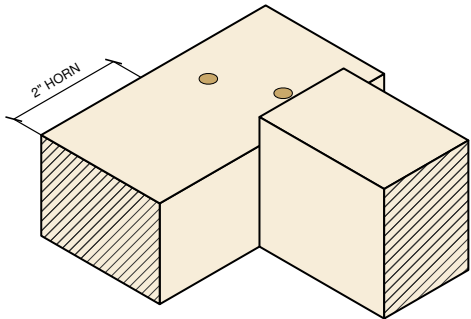
1-1/3" = 1'-0"

SQUARE HORN

STILE RUN 2" PAST THE CHECK RAIL, END SQUARE.

OGEE HORN

SAME RUN, END SHAPED; THE OUTER EDGE STAYS STRAIGHT.



HORNS: NONE STANDARD. SQUARE OR OGEE BY SELECTION, 2" UNLESS A LENGTH IS GIVEN ON THE ORDER FORM. BOTH HORNS OF A SASH MATCH.
CHECK RAIL SHOWN PLAIN; ITS BEVEL PER A201.

3 HORN OPTIONS — UPPER SASH STILE AT THE CHECK RAIL

3-5/8" = 1'-0" (ISOMETRIC)

KEY

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JOINERY AND HORNS

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