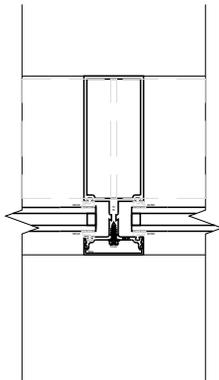


CODE = R-15ci | F-0.52

BASE = U-0.29 | OPTIMIZED = U-0.24

PSI VALUE = SEE BELOW

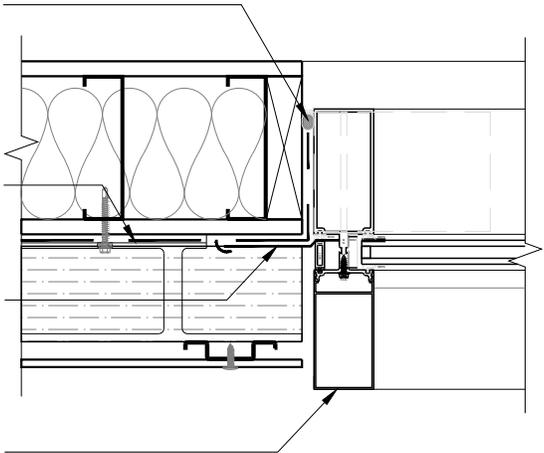


VERTICAL MULLION

BACKER ROD & SEALANT.
(COSMETIC SEAL)

HOLD THERMAZEE
FASTENING BACK FROM
SILICONE FLASHING FOR
ROUGH OPENING.

SILICONE FLASHING.
TERMINATE ON WALL AND
IN CURTAIN WALL GLAZING
POCKET
(ELBEX, HS222)
EXTENDED
CURTAINWALL COVER
(EFCO, 5600X)



JAMB

JAMB PSI VALUES:
BASE = 0.108
OPTIMIZED = 0.111

NOTE(S):

1. DETAILS BASED ON EFCO 5600X SERIES
2 1/2"x7 1/2" CURTAINWALL w/ DURACAST
PRESSURE PLATE.
U-0.20 COG AT BASE (SHOWN)
U-0.12 COG AT OPTIMIZED
2. INTERIOR FINISH NOT SHOWN FOR CLARITY.

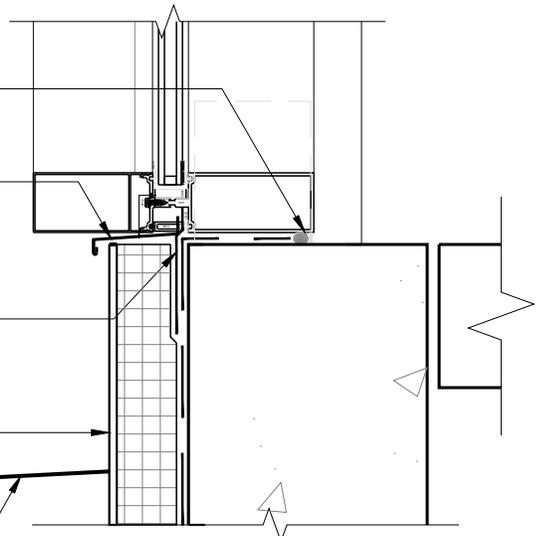
BACKER ROD & SEALANT.
(COSMETIC SEAL)

0.040" ALUMINUM SILL TRIM
(3A COMPOSITES, ALUCOBOND AXCENT)

SILICONE FLASHING.
TERMINATE ON WALL AND IN
CURTAIN WALL GLAZING POCKET
(ELBEX, HS222)

CONCRETE FACED RIGID
PERIMETER INSULATION, R-15ci MIN.
(TCLEAR, WALLGUARD)

FINISH GRADE.
ELEV. VARIES.



SILL & FOUNDATION

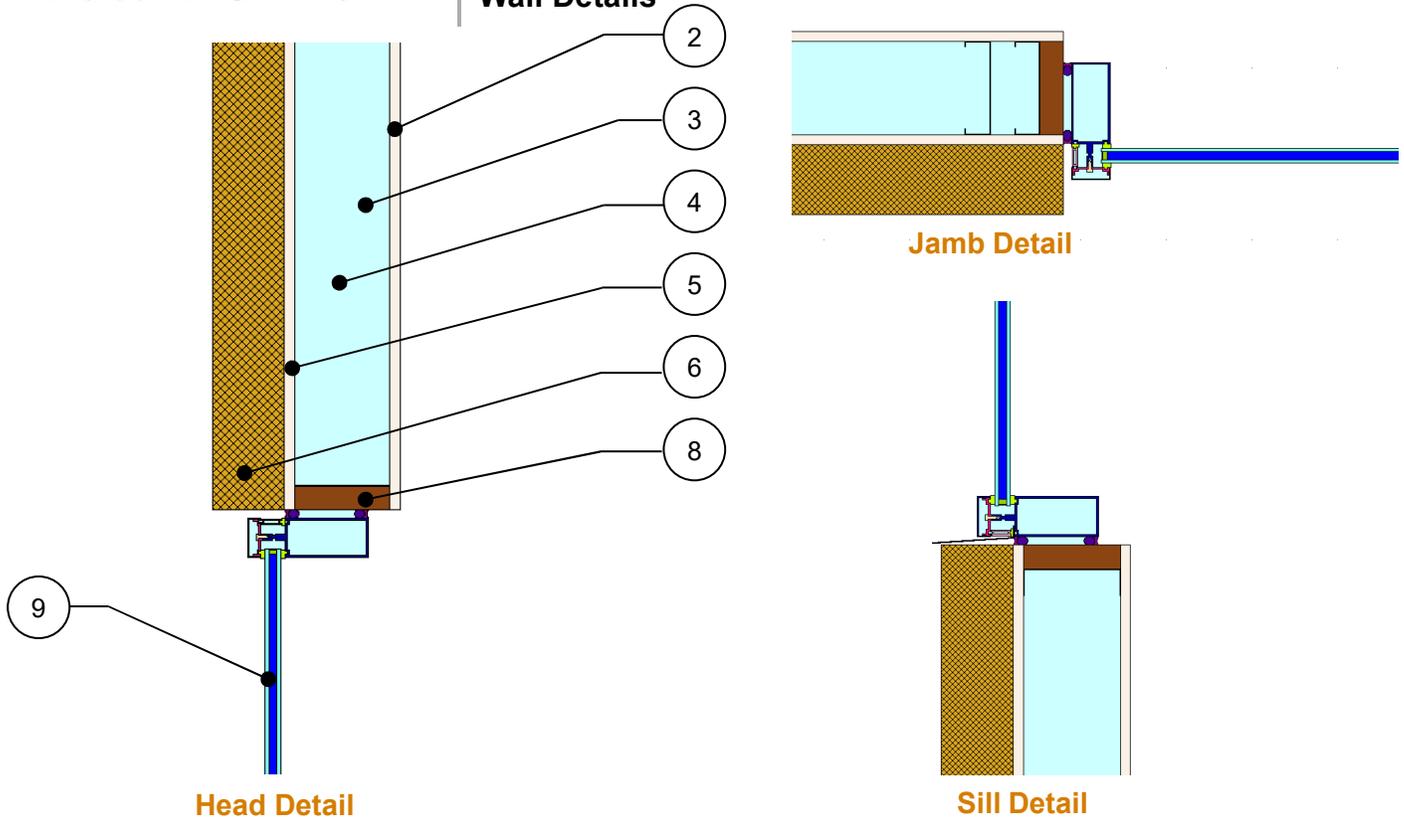
PSI VALUE: 0.308

FIBER CEMENT - CURTAIN WALL DETAILS

SCALE: 1 1/2" = 1'-0"

Detail SK-07A

Horizontal ThermaZee System Exterior Insulation – Curtain Wall Details



ID	Component	Thickness Inches (mm)	Conductivity Btu·in / ft ² ·hr·oF (W/m K)	Nominal Resistance hr·ft ² ·oF/Btu (m ² K/W)
1	Interior Film (right side) ¹	-	-	R-0.68 (0.12 RSI)
2	Gypsum Board	0.625" (16)	1.11 (0.16)	R-0.57 (0.1 RSI)
3	Air in Stud Cavity	6" (153)	4.16 (0.6)	R-1.48 (0.26 RSI)
4	6" Steel Studs	18 Gauge	429.9 (62)	-
5	Gypsum Sheathing	0.625" (16)	1.11 (0.16)	R-0.57 (0.1 RSI)
6	Mineral Wool Insulation	4.5" (115)	0.24 (0.034)	R-19.19 (3.38 RSI)
7	Knight Wall ThermaZee cladding attachment system (24" o.c.)	18 Gauge	429.9 (62)	-
8	Wood Blocking	9.625" (245)	0.97 (0.14)	-
9	EFCO Series 5600X Aluminum Curtain Wall System: double glazed IGU U _{COG} = 0.20 BTU/hr·ft ² ·°F (1.13 W/m ² K)			
10	Exterior Films (left side) ¹	-	-	R-0.17 (0.03 RSI) to R-0.68 (0.12 RSI)

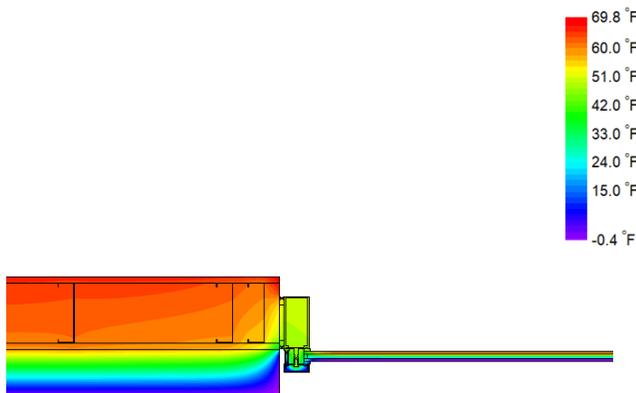
¹ Value selected from table 1, p. 26.1 of 2009 ASHRAE Handbook – Fundamentals depending on surface orientation

² The thermal conductivity of air spaces within framing was found using ISO 100077-2

Detail SK-07A

Horizontal ThermaZee System Exterior Insulation – Curtain Wall Jamb

Thermal Performance Indicators



Assembly 1D (Nominal) R-Value	R_{1D}	R-22.6 (3.98 RSI)
Transmittance / Resistance without Anomaly	U_o R_o	“Clear Wall” U- and R-value of curtain wall assembly
Linear Transmittance	ψ	Incremental increase in transmittance per linear length

*Assumptions and limitations for surface temperatures identified in ASHRAE 1365-RP.

Curtain Wall Jamb

Nominal (1D) vs. Assembly Performance Indicators

Base Assembly – Clear Wall

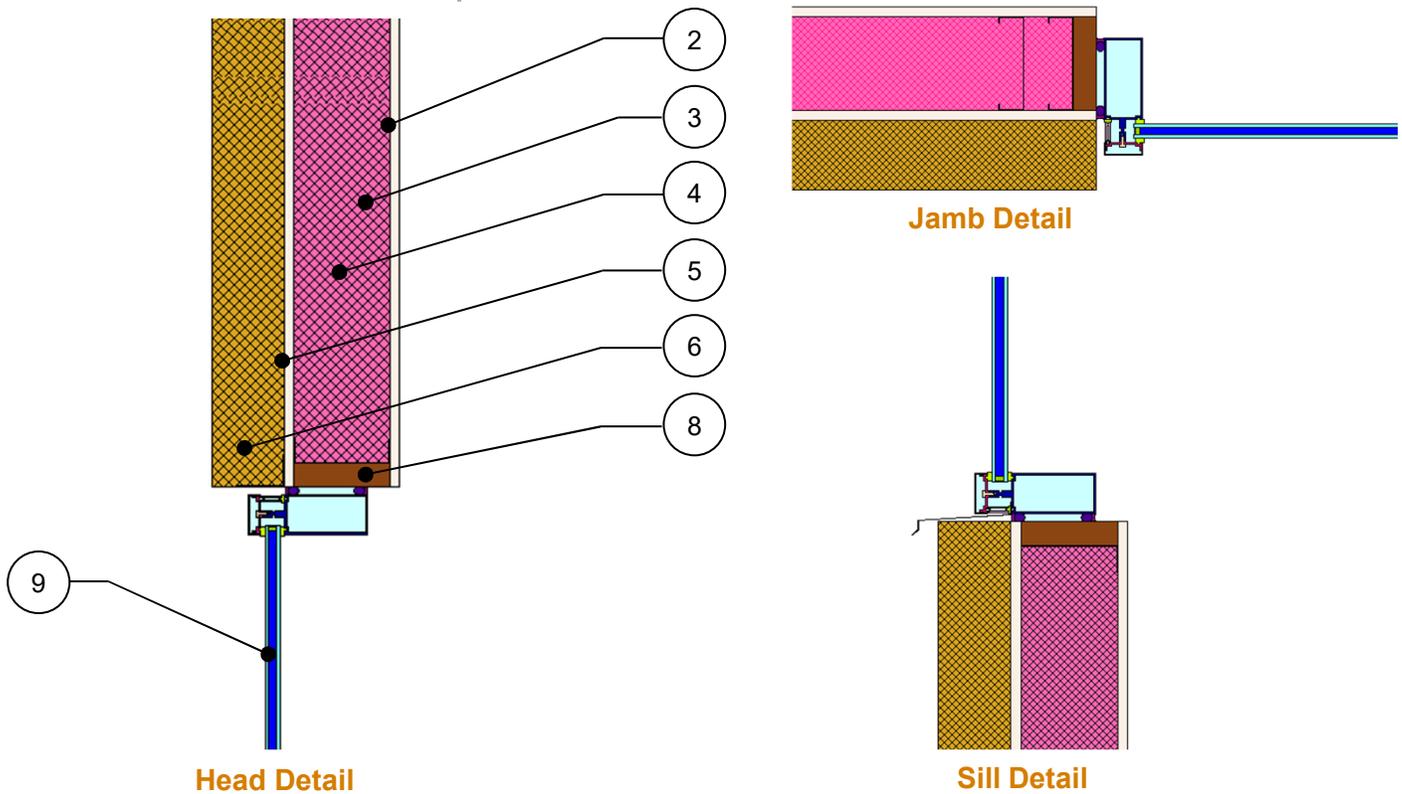
R_{1D} ft ² ·hr·°F / Btu (m ² K / W)	R_o ft ² ·hr·°F / Btu (m ² K / W)	U_o Btu/ft ² ·hr·°F (W/m ² K)	ψ Btu/ft·hr·°F (W/m K)
R-22.6 (3.98)	R-18.7 (3.29)	0.053 (0.3)	0.108 (0.19)

Base Assembly - Glazing

U_{COG} Btu/ft ² ·hr·°F (W/m ² K)
0.20 (1.13)

Detail SK-07A

Horizontal ThermaZee System Exterior & Interior Insulation – Curtain Wall Details



ID	Component	Thickness Inches (mm)	Conductivity Btu-in / ft ² ·hr·oF (W/m K)	Nominal Resistance hr·ft ² ·oF/Btu (m ² K/W)
1	Interior Film (right side) ¹	-	-	R-0.68 (0.12 RSI)
2	Gypsum Board	0.625" (16)	1.11 (0.16)	R-0.57 (0.1 RSI)
3	Fiberglass Batt Insulation	6" (153)	-	R-19.0 (3.35 RSI)
4	6" Steel Studs	18 Gauge	429.9 (62)	-
5	Gypsum Sheathing	0.625" (16)	1.11 (0.16)	R-0.57 (0.1 RSI)
6	Mineral Wool Insulation	4.5" (115)	0.24 (0.034)	R-19.19 (3.38 RSI)
7	Knight Wall ThermaZee cladding attachment system (24" o.c.)	18 Gauge	429.9 (62)	-
8	Wood Blocking	9.625" (245)	0.97 (0.14)	-
9	EFCO Series 5600X Aluminum Curtain Wall System: double glazed IGU U _{COG} = 0.20 BTU/hr·ft ² ·°F (1.13 W/m ² K)			
10	Exterior Films (left side) ¹	-	-	R-0.17 (0.03 RSI) to R-0.68 (0.12 RSI)

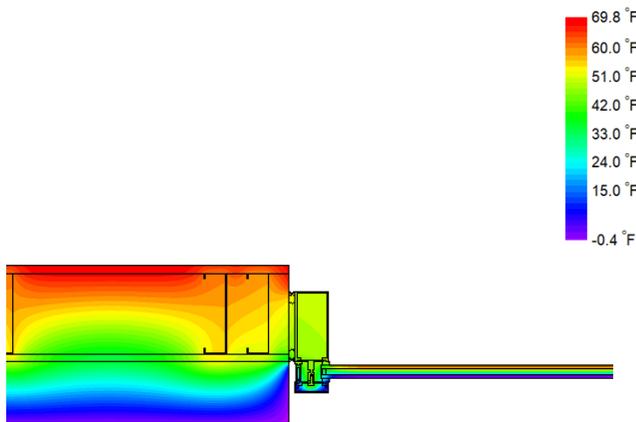
¹ Value selected from table 1, p. 26.1 of 2009 ASHRAE Handbook – Fundamentals depending on surface orientation

² The thermal conductivity of air spaces within framing was found using ISO 100077-2

Detail SK-07A

Horizontal ThermaZee System Exterior Insulation & Interior – Curtain Wall Jamb

Thermal Performance Indicators



Assembly 1D (Nominal) R-Value	R_{1D}	R-40.7 (7.17 RSI)
Transmittance / Resistance without Anomaly	U_o R_o	“Clear Wall” U- and R-value of curtain wall assembly
Linear Transmittance	ψ	Incremental increase in transmittance per linear length

*Assumptions and limitations for surface temperatures identified in ASHRAE 1365-RP.

Curtain Wall Jamb

Nominal (1D) vs. Assembly Performance Indicators

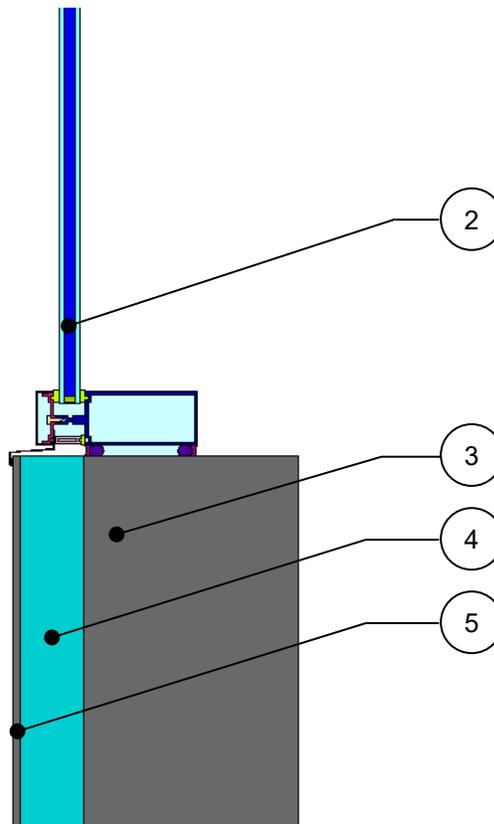
Base Assembly – Clear Wall

R_{1D} ft ² ·hr·°F / Btu (m ² K / W)	R_o ft ² ·hr·°F / Btu (m ² K / W)	U_o Btu/ft ² ·hr·°F (W/m ² K)	ψ Btu/ft·hr·°F (W/m K)
R-40.7 (7.17)	R-27.78 (4.89)	0.036 (0.2)	0.111 (0.19)

Base Assembly - Glazing

U_{COG} Btu/ft ² ·hr·°F (W/m ² K)
0.20 (1.13)

Detail SK-07B | Curtain Wall Sill at Foundation



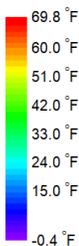
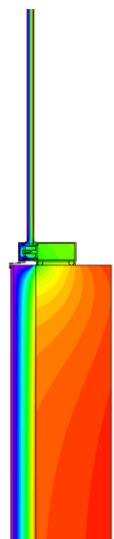
ID	Component	Thickness Inches (mm)	Conductivity Btu·in / ft ² ·hr·°F (W/m K)	Nominal Resistance hr·ft ² ·°F/Btu (m ² K/W)
1	Interior Film (right side) ¹	-	-	R-0.68 (0.12 RSI)
2	EFCO 5600X Aluminum Curtain Wall System: double glazed IGU U _{COG} = 0.20 BTU/hr-ft ² ·°F (1.14 W/m ² K)			
3	Concrete Foundation Wall	10" (254)	12.48 (1.8)	R-0.79 (0.14 RSI)
4	XPS Insulation	3" (77)	0.2 (0.029)	R-15.1 (2.66 RSI)
5	Cement Protection Board	0.3125" (8)	12.48 (1.8)	R-0.03 (0.004 RSI)
6	Exterior Film (left side) ¹	-	-	R-0.17 (0.03 RSI)

¹ Value selected from table 1, p. 26.1 of 2009 ASHRAE Handbook – Fundamentals depending on surface orientation

² The thermal conductivity of air spaces within framing was found using ISO 100077-2

Detail SK-07B | Curtain Wall Sill at Foundation

Thermal Performance Indicators



Assembly 1D (Nominal) R-Value	R_{1D}	R-16.8 (2.95 RSI)
Transmittance / Resistance without Anomaly	U_o R_o	“Clear Wall” U- and R-value of wall assembly
Linear Transmittance	ψ	Incremental increase in transmittance per linear length

¹Assumptions and limitations for surface temperatures identified in ASHRAE 1365-RP.

Curtain Wall Sill at Foundation

Nominal (1D) vs. Assembly Performance Indicators

Base Assembly – Clear Wall

R_{1D} ft ² ·hr·°F / Btu (m ² K / W)	R_o ft ² ·hr·°F / Btu (m ² K / W)	U_o Btu/ft ² ·hr·°F (W/m ² K)	ψ Btu/ft·hr·°F (W/m K)
R-16.8 (2.95)	R-16.8 (2.95)	0.06 (1.2)	0.308 (0.53)

Base Assembly – Glazing

U_{COG} Btu/ft ² ·hr·°F (W/m ² K)
0.20 (1.13)