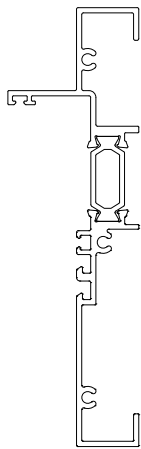


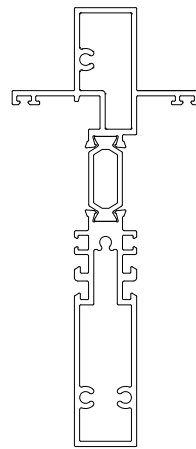
1850 FIXED WINDOW

185.2.21.0.0
SECTION 25.4mm (1") EXTENSION

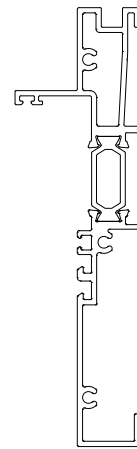
Double Glazed



108.9mm (4 1/4")
25.4mm (1") Extension
Rolled Perimeter



108.9mm (4 1/4")
25.4mm (1") Extension
Rolled Mullion



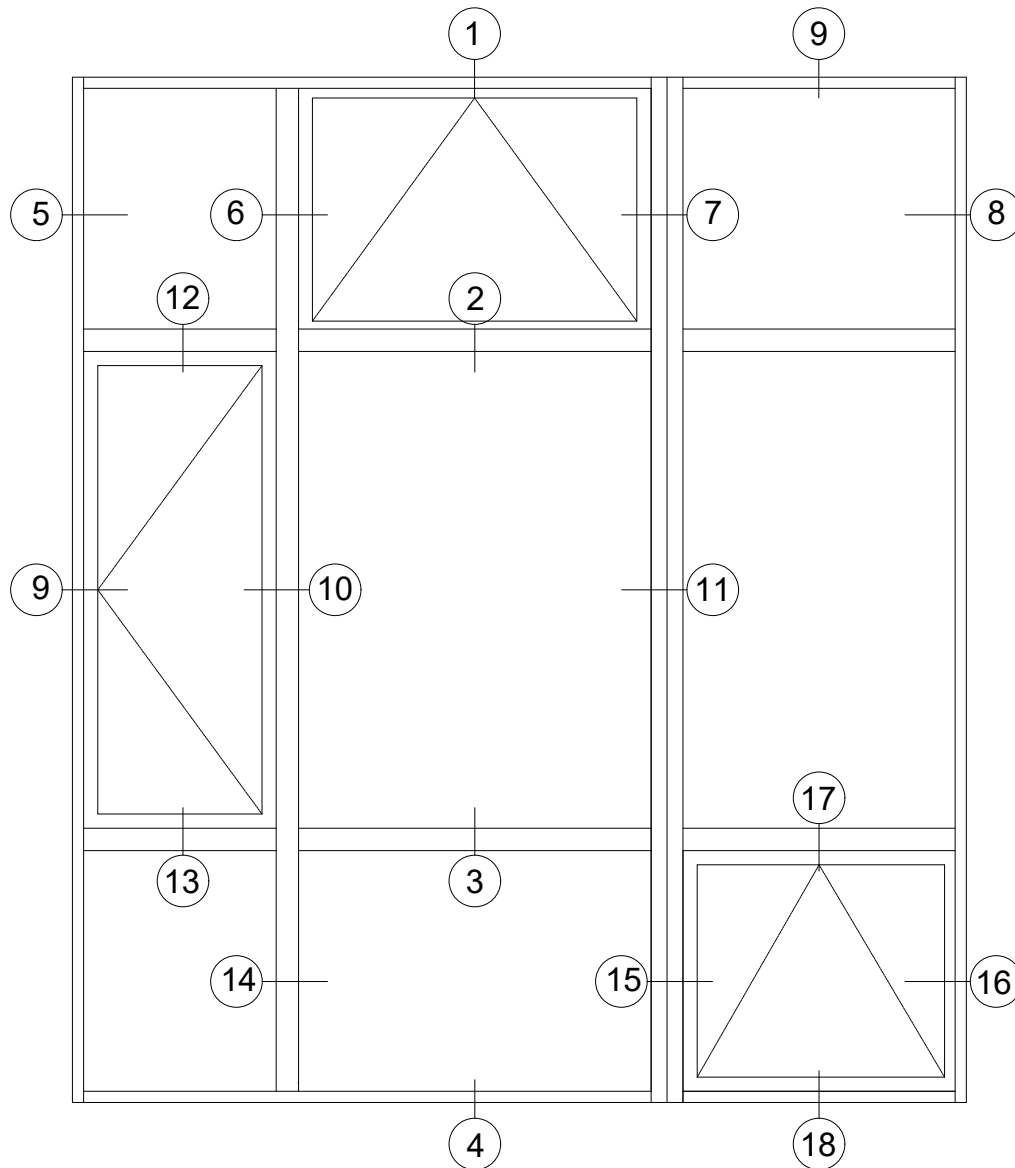
108.9mm (4 1/4")
25.4mm (1") Extension
Rolled Sill

1850 Double Glazed with 25.4mm (1") exterior framing extension series option that fits along with wall that has deeper opening. This profile series provides better exterior view and lighting reception due to its thin framing. It also provide unlimited option to any custom size operable windows and/or doors.

1850 FIXED WINDOW

185.2.21.0
SECTION 25.4mm (1") EXTENSION

Double Glazed



ENERFREES™
Window & Wall Systems

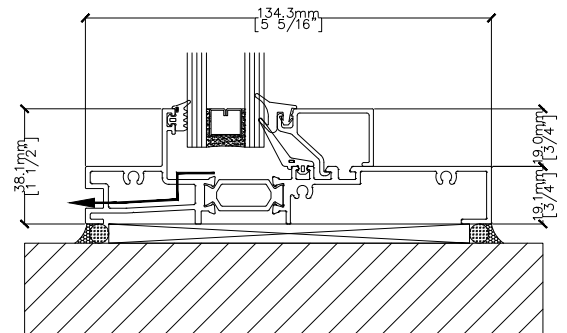
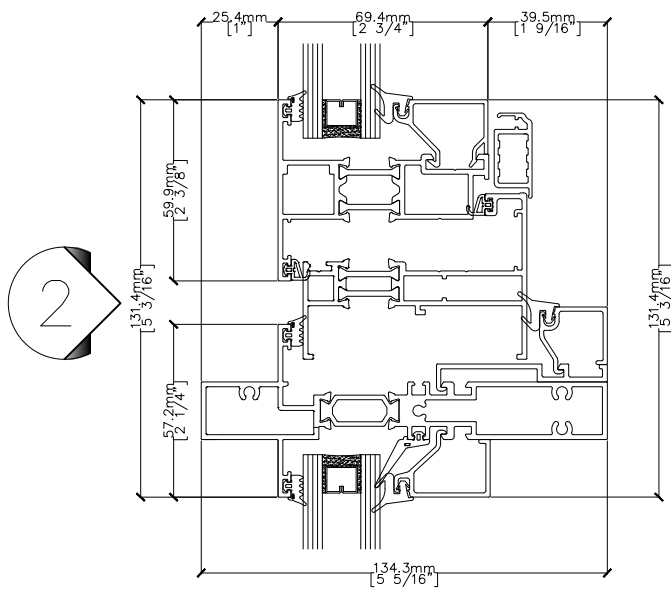
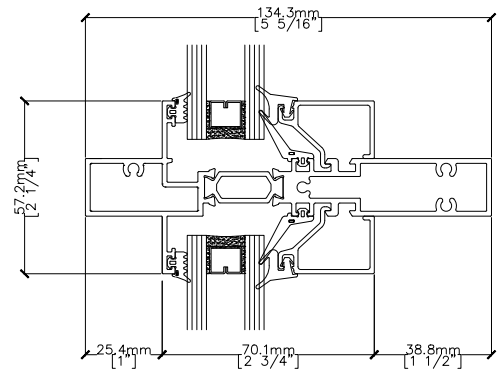
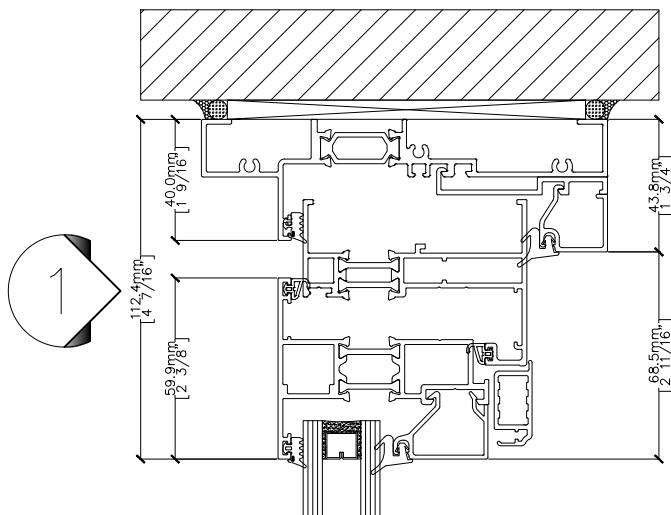
Manufacturer of High-performance Aluminum Systems
Address: 6 Denison St., Markham, Ontario, L3R 1B6
Tel: 1-800-678-1118 905-604-5118
www.enerfrees.com info@enerfrees.com

V2022.10

1850 FIXED WINDOW

185.2.21.1
SECTION 25.4mm (1") EXTENSION

Double Glazed



ENERFREES™
Window & Wall Systems

Manufacturer of High-performance Aluminum Systems
Address: 6 Denison St., Markham, Ontario, L3R 1B6
Tel: 1-800-678-1118
www.enerfrees.com

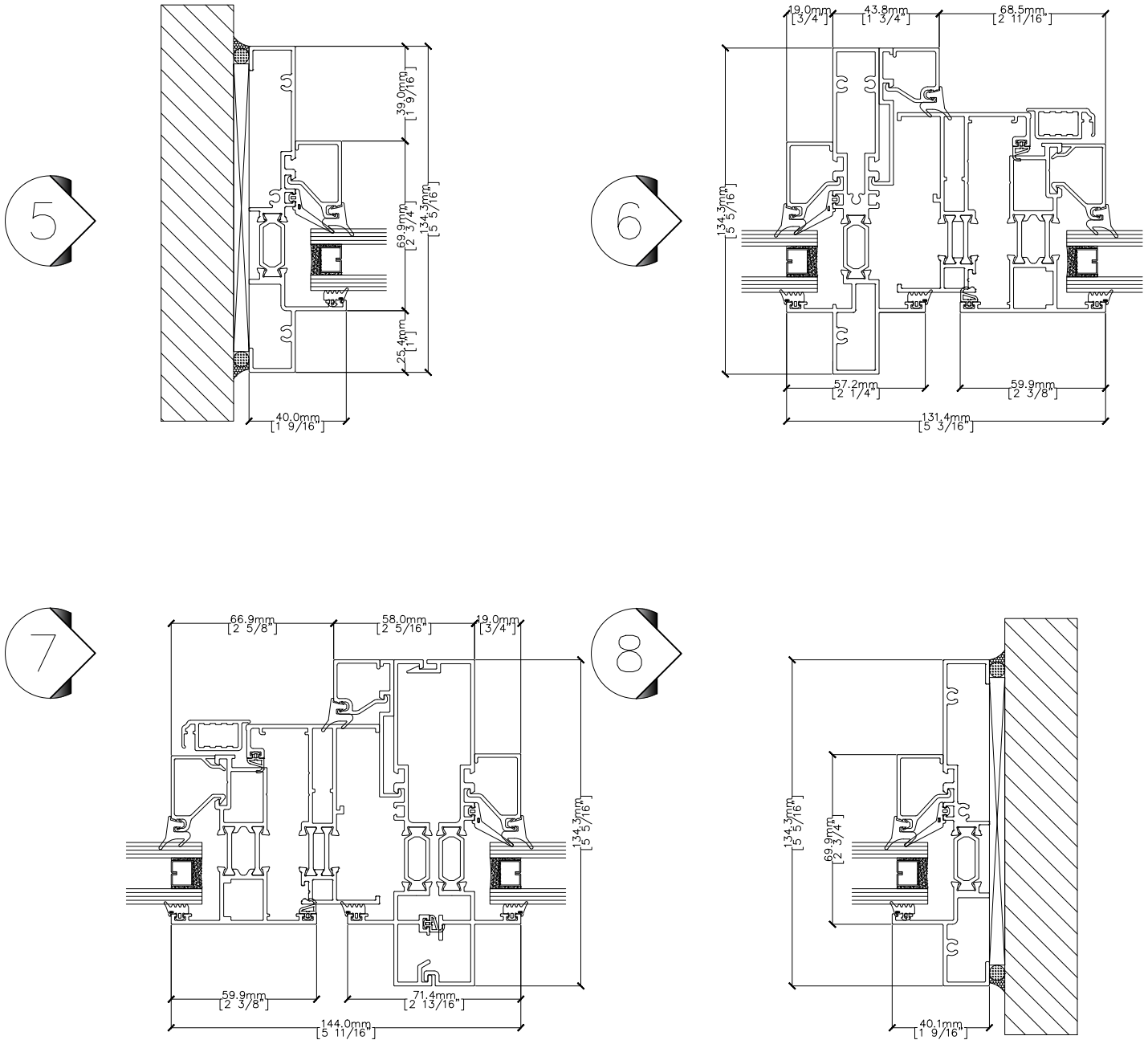
905-604-5118
info@enerfrees.com

V2022.10

1850 FIXED WINDOW

185.2.21.2
SECTION 25.4mm (1") EXTENSION

Double Glazed



ENERFREES™
Window & Wall Systems

Manufacturer of High-performance Aluminum Systems
Address: 6 Denison St., Markham, Ontario, L3R 1B6
Tel: 1-800-678-1118
www.enerfrees.com

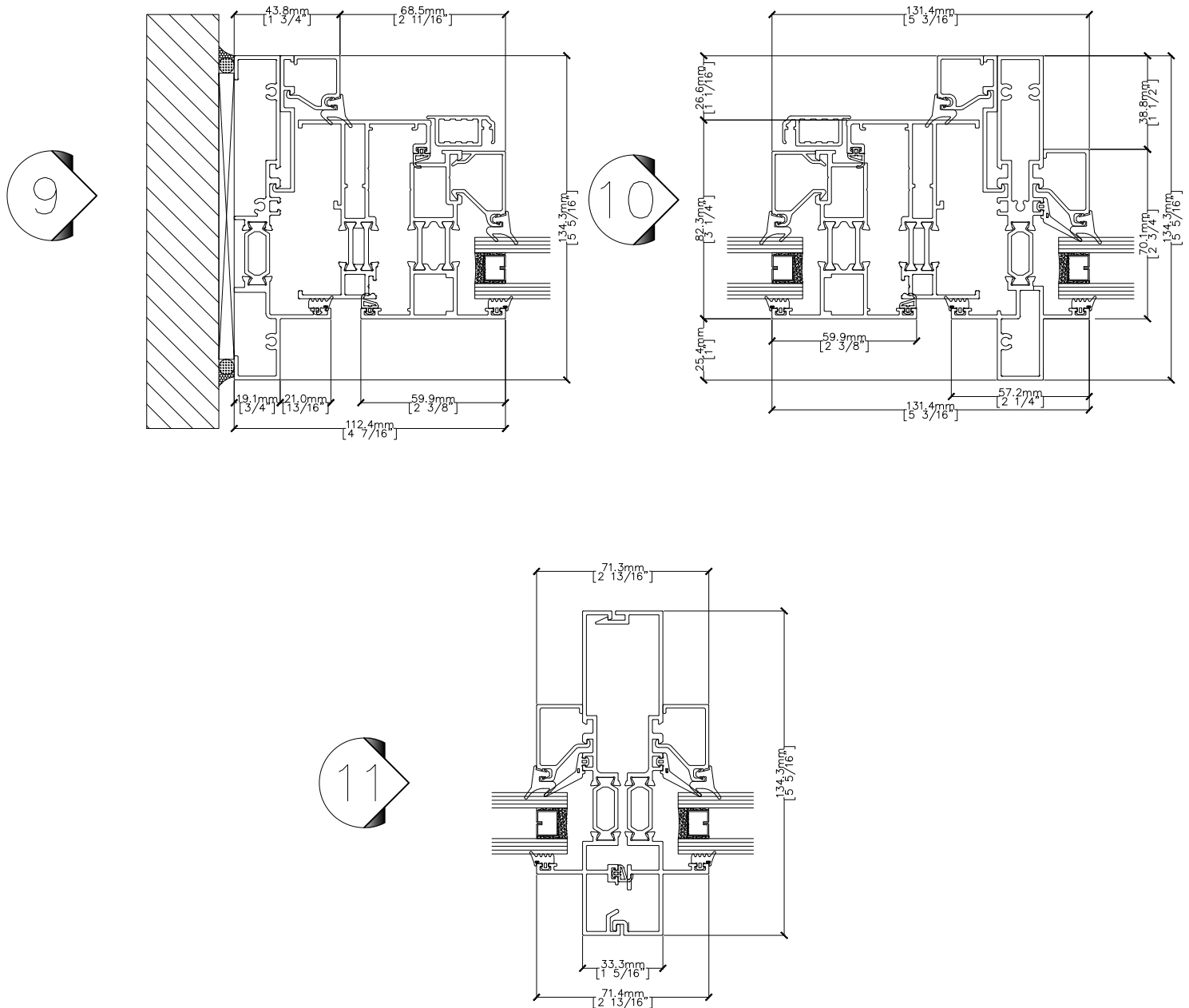
905-604-5118
info@enerfrees.com

V2022.10

1850 FIXED WINDOW

185.2.21.3
SECTION 25.4mm (1") EXTENSION

Double Glazed



ENERFREES™
Window & Wall Systems

Manufacturer of High-performance Aluminum Systems
Address: 6 Denison St., Markham, Ontario, L3R 1B6
Tel: 1-800-678-1118
www.enerfrees.com

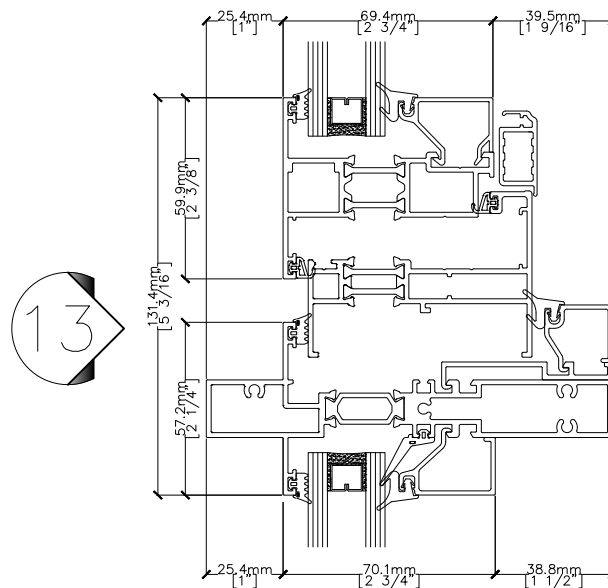
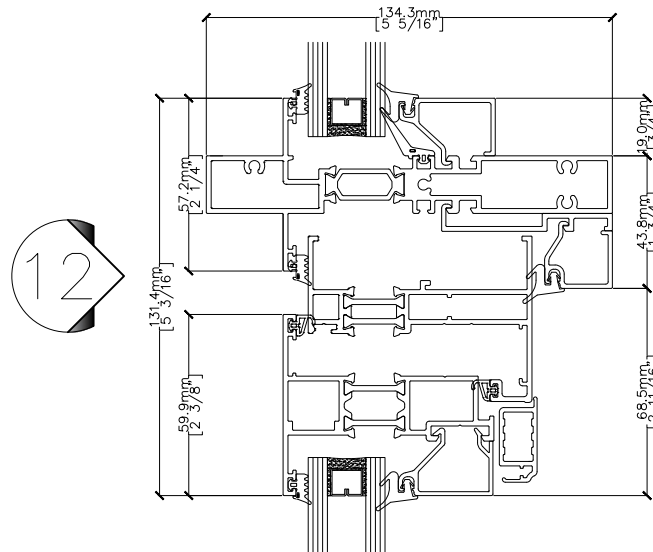
905-604-5118
info@enerfrees.com

V2022.10

1850 FIXED WINDOW

185.2.20.4
SECTION 25.4mm (1") EXTENSION

Double Glazed



ENERFREES™
Window & Wall Systems

Manufacturer of High-performance Aluminum Systems
Address: 6 Denison St., Markham, Ontario, L3R 1B6
Tel: 1-800-678-1118
www.enerfrees.com

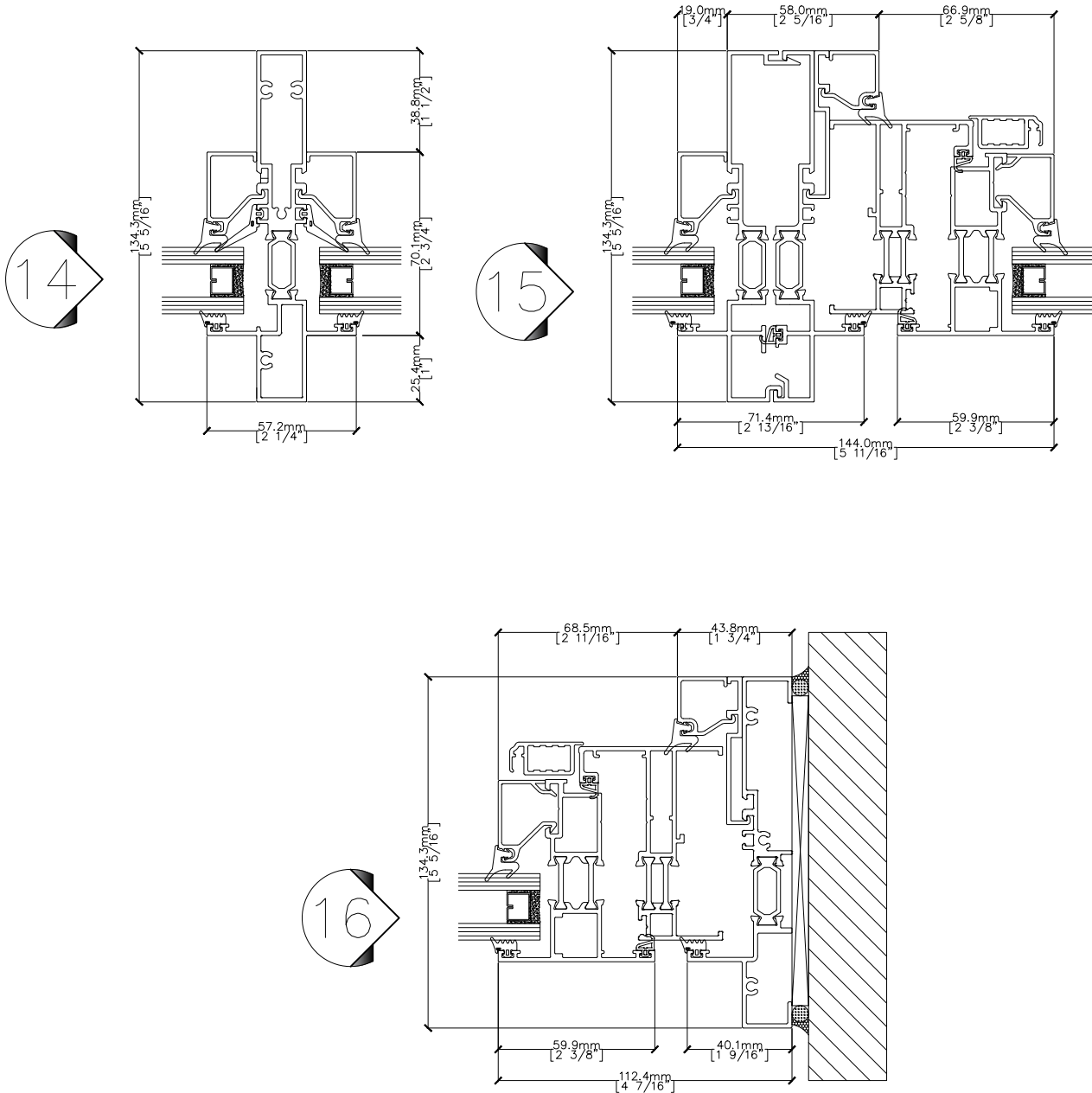
905-604-5118
info@enerfrees.com

V2022.10

1850 FIXED WINDOW

185.2.20.5
SECTION 25.4mm (1") EXTENSION

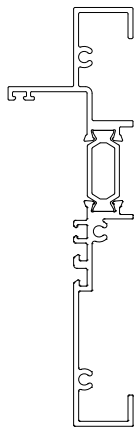
Double Glazed



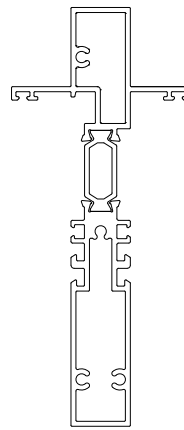
1850 FIXED WINDOW

185.3.21.0.0
SECTION 25.4mm (1") EXTENSION

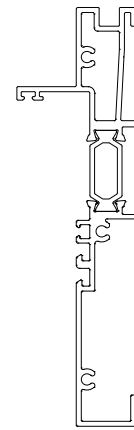
Triple Glazed



133.4mm (5 1/4")
25.4mm (1") Extension
Rolled Perimeter



133.4mm (5 1/4")
25.4mm (1") Extension
Rolled Mullion



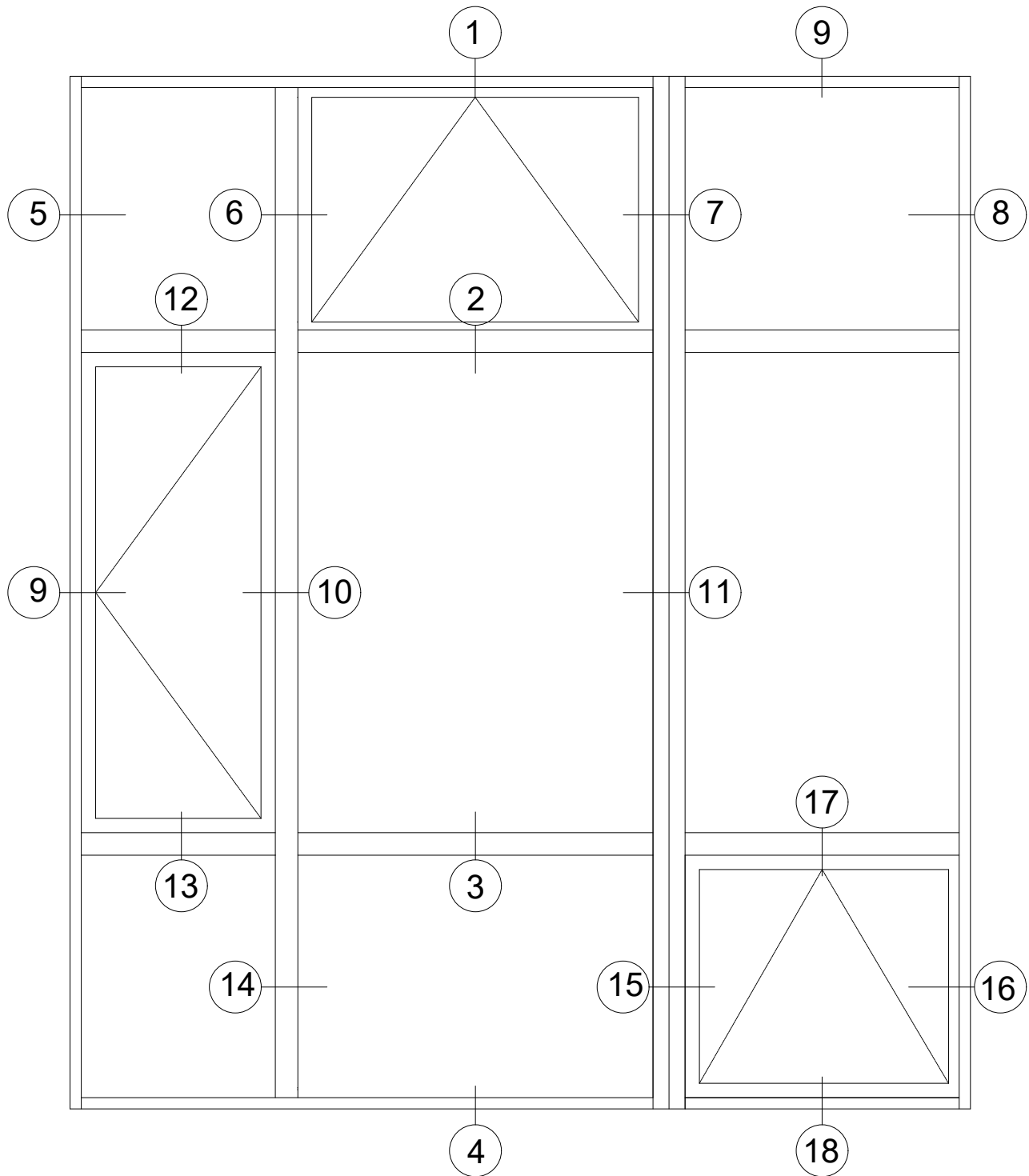
133.4mm (5 1/4")
25.4mm (1") Extension
Rolled Sill

1850 Triple Glazed with 25.4mm (1") exterior framing extension series option that fits along with wall that has deeper opening. This profile series provides better exterior view and lighting reception due to its thin framing. It also provide unlimited option to any custom size operable windows and/or doors.

1850 FIXED WINDOW

185.3.21.0
SECTION 25.4mm (1") EXTENSION

Triple Glazed



ENERFREES™
Window & Wall Systems

Manufacturer of High-performance Aluminum Systems
Address: 6 Denison St., Markham, Ontario, L3R 1B6
Tel: 1-800-678-1118
www.enerfrees.com

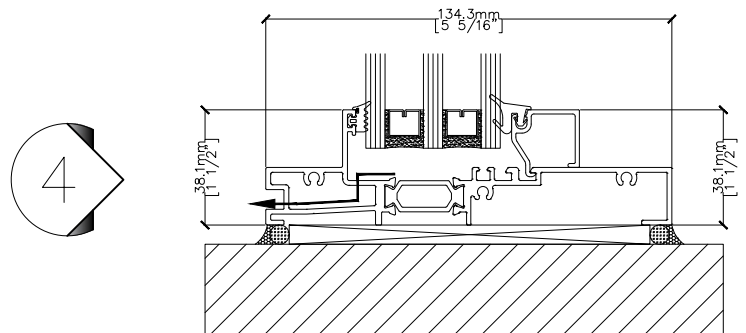
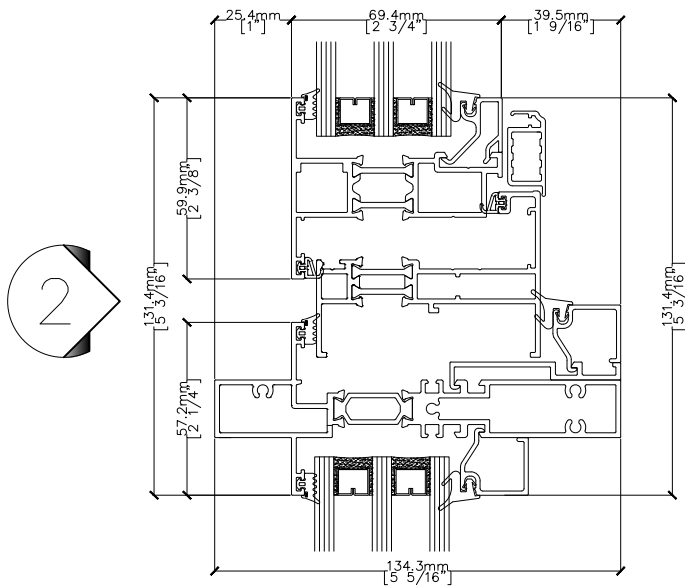
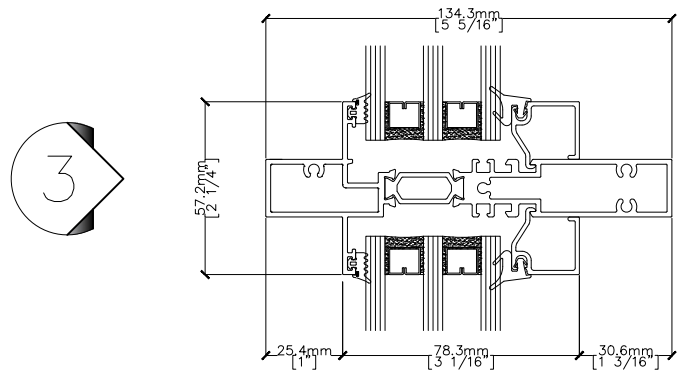
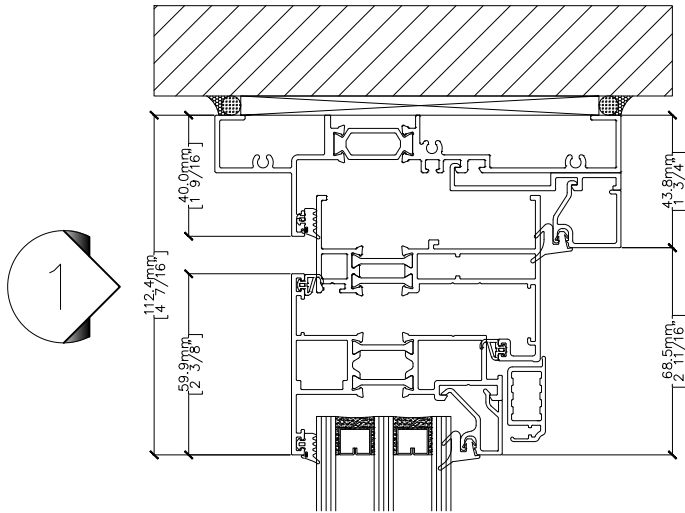
905-604-5118
info@enerfrees.com

V2022.10

1850 FIXED WINDOW

185.3.21.1
SECTION 25.4mm (1") EXTENSION

Triple Glazed



ENERFREES™
Window & Wall Systems

Manufacturer of High-performance Aluminum Systems
Address: 6 Denison St., Markham, Ontario, L3R 1B6
Tel: 1-800-678-1118
www.enerfrees.com

905-604-5118
info@enerfrees.com

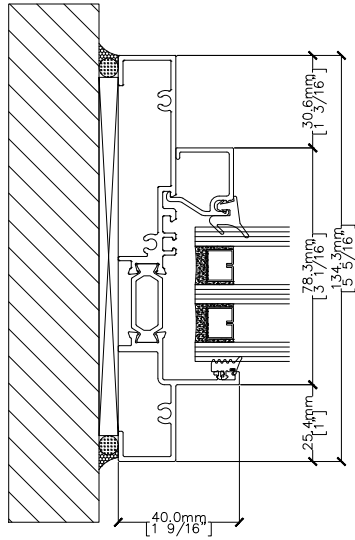
V2022.10

1850 FIXED WINDOW

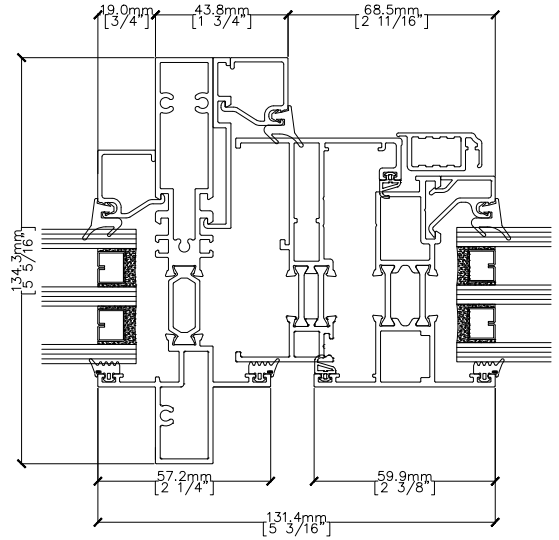
185.3.21.2
SECTION 25.4mm (1") EXTENSION

Triple Glazed

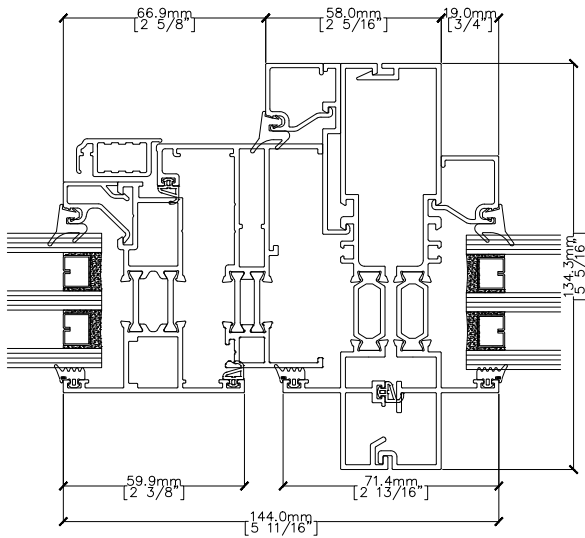
5



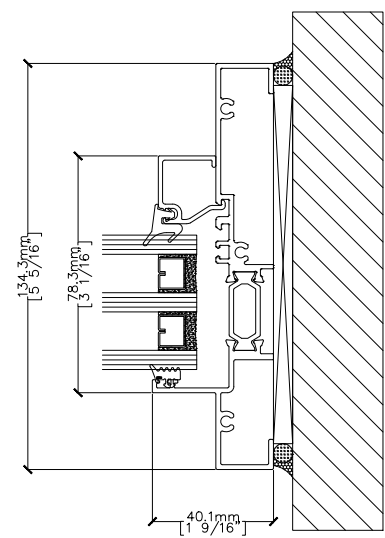
6



7



8



ENERFREES™
Window & Wall Systems

Manufacturer of High-performance Aluminum Systems
Address: 6 Denison St., Markham, Ontario, L3R 1B6
Tel: 1-800-678-1118
www.enerfrees.com

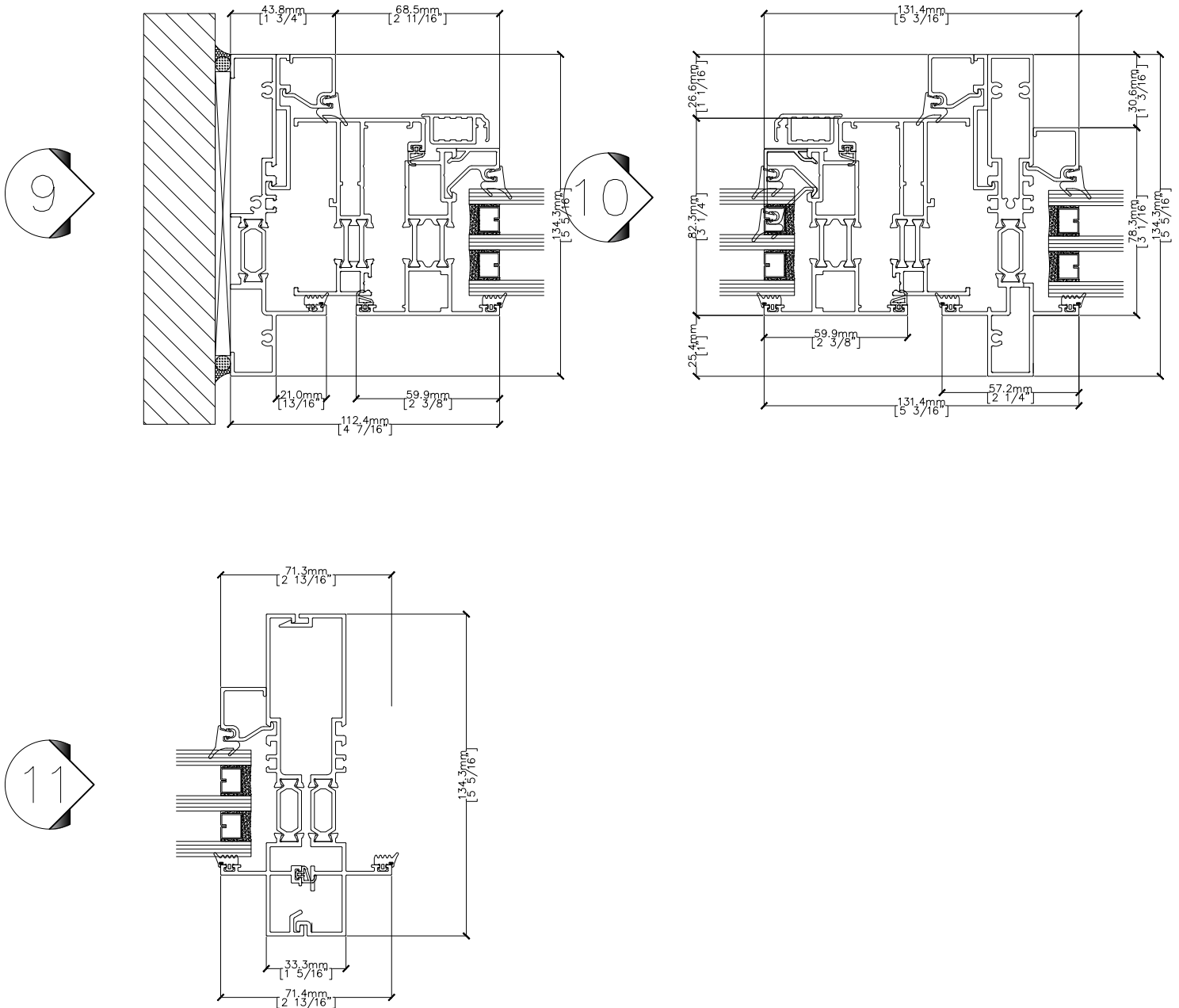
905-604-5118
info@enerfrees.com

V2022.10

1850 FIXED WINDOW

185.3.21.3
SECTION 25.4mm (1") EXTENSION

Triple Glazed



ENERFREES™
Window & Wall Systems

Manufacturer of High-performance Aluminum Systems
Address: 6 Denison St., Markham, Ontario, L3R 1B6
Tel: 1-800-678-1118
www.enerfrees.com

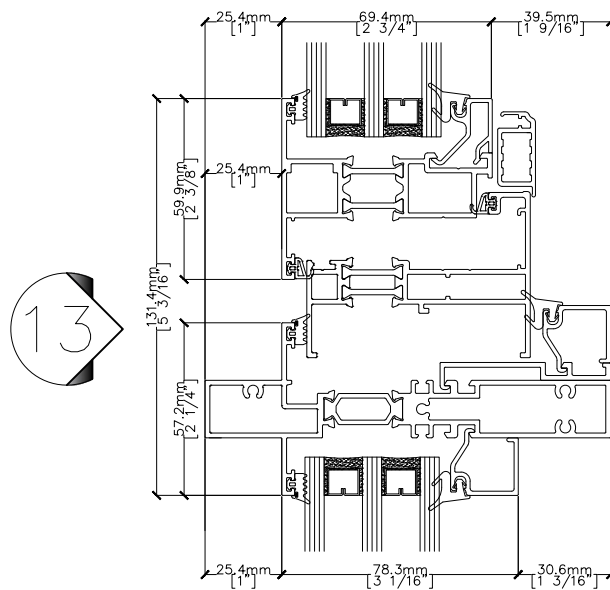
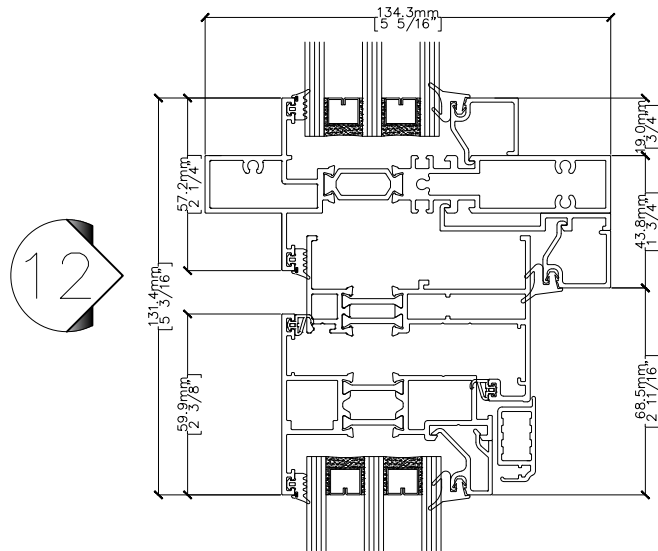
905-604-5118
info@enerfrees.com

V2022.10

1850 FIXED WINDOW

185.3.21.4
SECTION 25.4mm (1") EXTENSION

Triple Glazed



ENERFREES™
Window & Wall Systems

Manufacturer of High-performance Aluminum Systems
Address: 6 Denison St., Markham, Ontario, L3R 1B6
Tel: 1-800-678-1118
www.enerfrees.com

905-604-5118
info@enerfrees.com

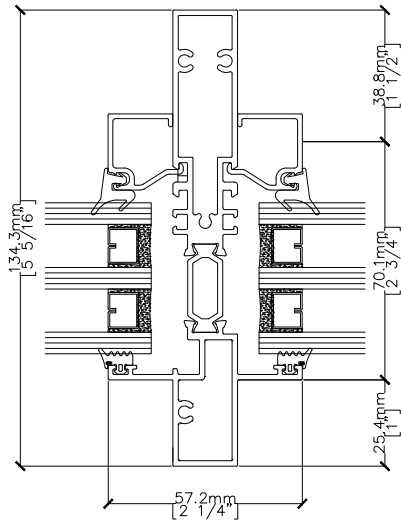
V2022.10

1850 FIXED WINDOW

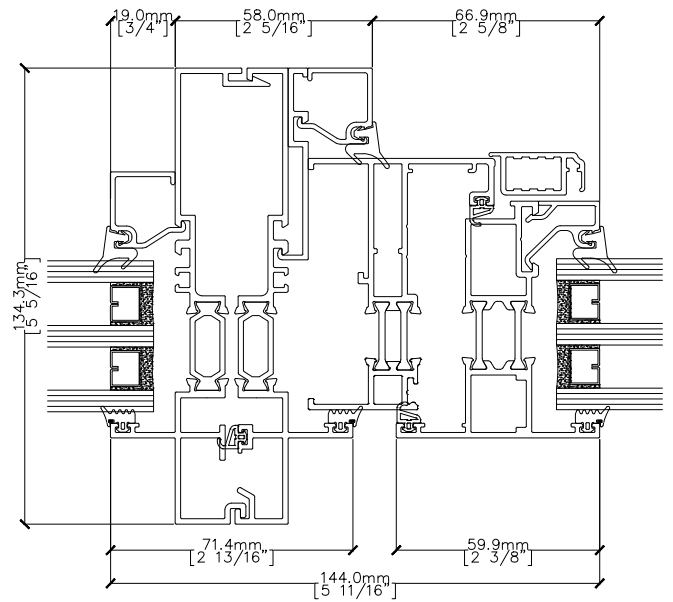
185.3.21.5
SECTION 25.4mm (1") EXTENSION

Triple Glazed

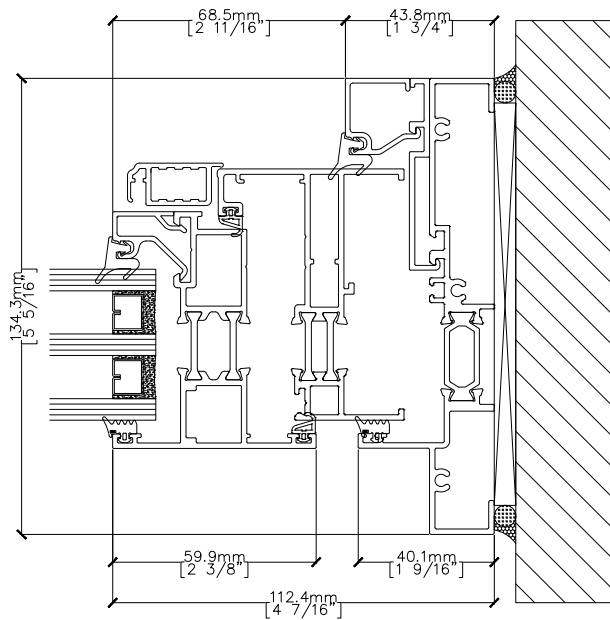
14



15



16



ENERFREES™
Window & Wall Systems

Manufacturer of High-performance Aluminum Systems
Address: 6 Denison St., Markham, Ontario, L3R 1B6
Tel: 1-800-678-1118
www.enerfrees.com

905-604-5118
info@enerfrees.com

V2022.10

1850 FIXED WINDOW

185.4.2

WIND LOAD CHART 25.4mm (1") EXTENSION

A = 20 PSF

B = 25 PSF

C = 30 PSF

D = 35 PSF

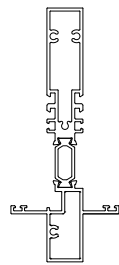
E = 40 PSF

F = 50 PSF

G = 60 PSF

$I_x = 2.8842 \text{ in}^4$

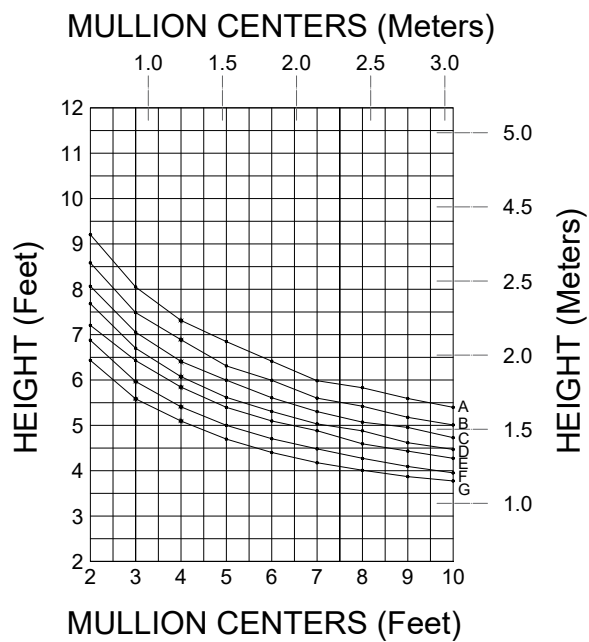
$S_x = 1.0193 \text{ in}^3$



185002

133.4mm (5 1/4")

Mullion (Vertical/Horizontal)



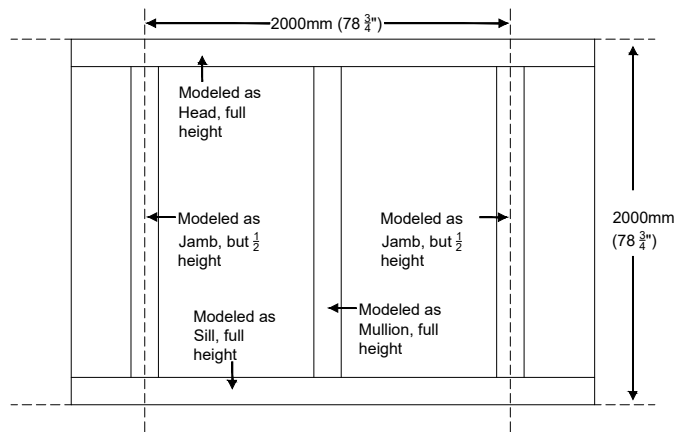
ENERFREES™
Window & Wall Systems

Manufacturer of High-performance Aluminum Systems
Address: 6 Denison St., Markham, Ontario, L3R 1B6
Tel: 1-800-678-1118 905-604-5118
www.enerfrees.com info@enerfrees.com

V2022.10

1850 FIXED WINDOW

1. The overall product U-factors are determined in accordance with NFRC 100-2010.
2. The Center-of-Glazing U-factors are determined by the insulated glass unit (IGU) and provided for by glass manufacturer/supplier.
3. The simulated specimen size is based on NFRC 100-2010 Table 4-3 Product Type Window Wall, which is 2000mm (78 3/4") width by 2000mm (78 3/4") and height (full height of head and sill, 1/2 width of the vertical mullion). See below:



DOUBLE GLAZED

METRIC UNIT

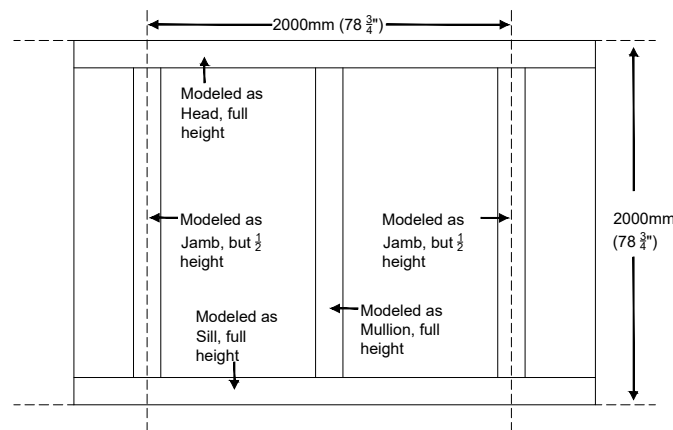
Center-of-Glazing U-factor (W/m ² -K)	Non-metal Spacer	Aluminum Spacer
	Product U-factor (W/m ² -K)	Product U-factor (W/m ² -K)
1.00	1.35	1.61
1.10	1.44	1.69
1.20	1.52	1.77
1.30	1.61	1.86
1.40	1.70	1.94
1.50	1.78	2.02
1.60	1.87	2.11
1.70	1.96	2.19
1.80	2.04	2.27
1.90	2.13	2.35
2.00	2.21	2.44
2.10	2.30	2.52
2.20	2.39	2.60
2.30	2.47	2.69
2.40	2.56	2.77
2.50	2.64	2.85

IMPERIAL UNIT

Center-of-Glazing U-factor (Btu/h-ft ² -F)	Non-metal Spacer	Aluminum Spacer
	Product U-factor (Btu/h-ft ² -F)	Product U-factor (Btu/h-ft ² -F)
0.18	0.24	0.29
0.20	0.26	0.30
0.22	0.28	0.32
0.24	0.29	0.34
0.26	0.31	0.35
0.28	0.33	0.37
0.30	0.34	0.39
0.32	0.36	0.40
0.34	0.38	0.42
0.36	0.40	0.44
0.38	0.41	0.45
0.40	0.43	0.47
0.42	0.45	0.49
0.44	0.47	0.50

1850 FIXED WINDOW

1. The overall product U-factors are determined in accordance with NFRC 100-2010.
2. The Center-of-Glazing U-factors are determined by the insulated glass unit (IGU) and should be obtained from the glass supplier.
3. The simulated specimen size is based on NFRC 100-2010 Table 4-3 Product Type Window Wall, which is 2000mm (78 3/4") width by 2000mm (78 3/4") height (full height of head and sill, 1/2 width of the vertical mullion). See below:



TRIPLE GLAZED

METRIC UNIT

Center-of-Glazing U-factor (W/m ² -K)	Non-metal Spacer Product	Aluminum Spacer Product
	U-factor (W/m ² -K)	U-factor (W/m ² -K)
0.50	0.86	1.12
0.60	0.95	1.20
0.70	1.03	1.29
0.80	1.12	1.37
0.90	1.21	1.46
1.00	1.30	1.54
1.10	1.39	1.63
1.20	1.47	1.71
1.30	1.56	1.80
1.40	1.65	1.88
1.50	1.74	1.97
1.60	1.83	2.05
1.70	1.92	2.14

IMPERIAL UNIT

Center-of-Glazing U-factor (Btu/h-ft ² -F)	Non-metal Spacer Product	Aluminum Spacer Product
	U-factor (Btu/h-ft ² -F)	U-factor (Btu/h-ft ² -F)
0.10	0.16	0.21
0.12	0.18	0.22
0.14	0.20	0.24
0.16	0.21	0.26
0.18	0.23	0.27
0.20	0.25	0.29
0.22	0.27	0.31
0.24	0.29	0.33
0.26	0.30	0.34
0.28	0.32	0.36
0.30	0.34	0.38