

## Energy Value Comparison

The energy values provided below are based on fenestration values, not the centre of glass values.

### Vision Glazing – x 1 Low E Coating

Using 6mm with standard low E #2 / 4mm clear / 4mm clear with argon fill and warm edge spacers.

SERIES	9003			9203			9603		
Freedow	Ufen		SHGCfen	Ufen		SHOOM	Ufen		SHCCtor
Energy	W/m²k	Btu/hft <sup>2</sup> F	SIGCTEN	W/m²k	Btu/hft <sup>2</sup> F	SHGCfen	W/m²k	Btu/hft <sup>2</sup> F	SHGCfen
Fixed	1.41	0.25	0.23	1.28	0.23	0.30	1.36	0.24	0.30
Operable	2.12	0.37	0.25	1.87	0.33	0.25	1.63	0.29	0.24

#### Vision Glazing – x 2 Low E Coatings

Using 6mm with standard low E #2 / 4mm with standard low E #4 / 4mm clear with argon fill and warm edge spacers.

SERIES	9003		9203			9603			
Epergy	Ufen		SHGCfen	Ufen		SHGCfen	Ufen		SHGCfen
Energy	W/m²k	Btu/hft <sup>2</sup> F	SIIGCIEII	W/m²k	Btu/hft <sup>2</sup> F	SHOCIEN	W/m²k	Btu/hft <sup>2</sup> F	SINGCIEN
Fixed	1.10	0.19	0.26	0.97	0.17	0.26	1.06	0.19	0.26
Operable	1.87	0.33	0.22	1.63	0.29	0.21	1.39	0.24	0.21

#### **Opaque Areas**

The R-Values noted below are based on using either spandrel glass, or various metal panel options on the exterior and an aluminum or galvanized back pan on the interior. **Note:** There is no back pan at bypass.

SERIES	9003		9203		9603	
Slab Nominal Support <sup>1</sup>	2 1/8"	1 1/8"	2 1/8"	1 1/8"	2 1/8"	1 1/8"
Opaque Areas <sup>2</sup>	R7	R7	R9	R9	R11 <sup>3</sup>	R11 <sup>3</sup>
Bypass <sup>2</sup>	R3	R6	R3	R6	R6	R9

<sup>1</sup> **Note:** Refer to detail page 9.1 for the 2 1/8" nominal support details and 9.2 for the 1 1/8" nominal support details, for the three above noted window wall systems. The 1 1/8" nominal support details provide an additional 1" of continuous mineral wool at the slab edge compared to the 2 1/8" nominal support details.

<sup>2</sup>**Note:** The exact R-Value will vary slightly depending on the exact opaque matrix – Spandrel glass, flush metal panel, raised metal panel, and an aluminum or galvanized back pan can result in the overall R-Value to vary by ~R0.5.

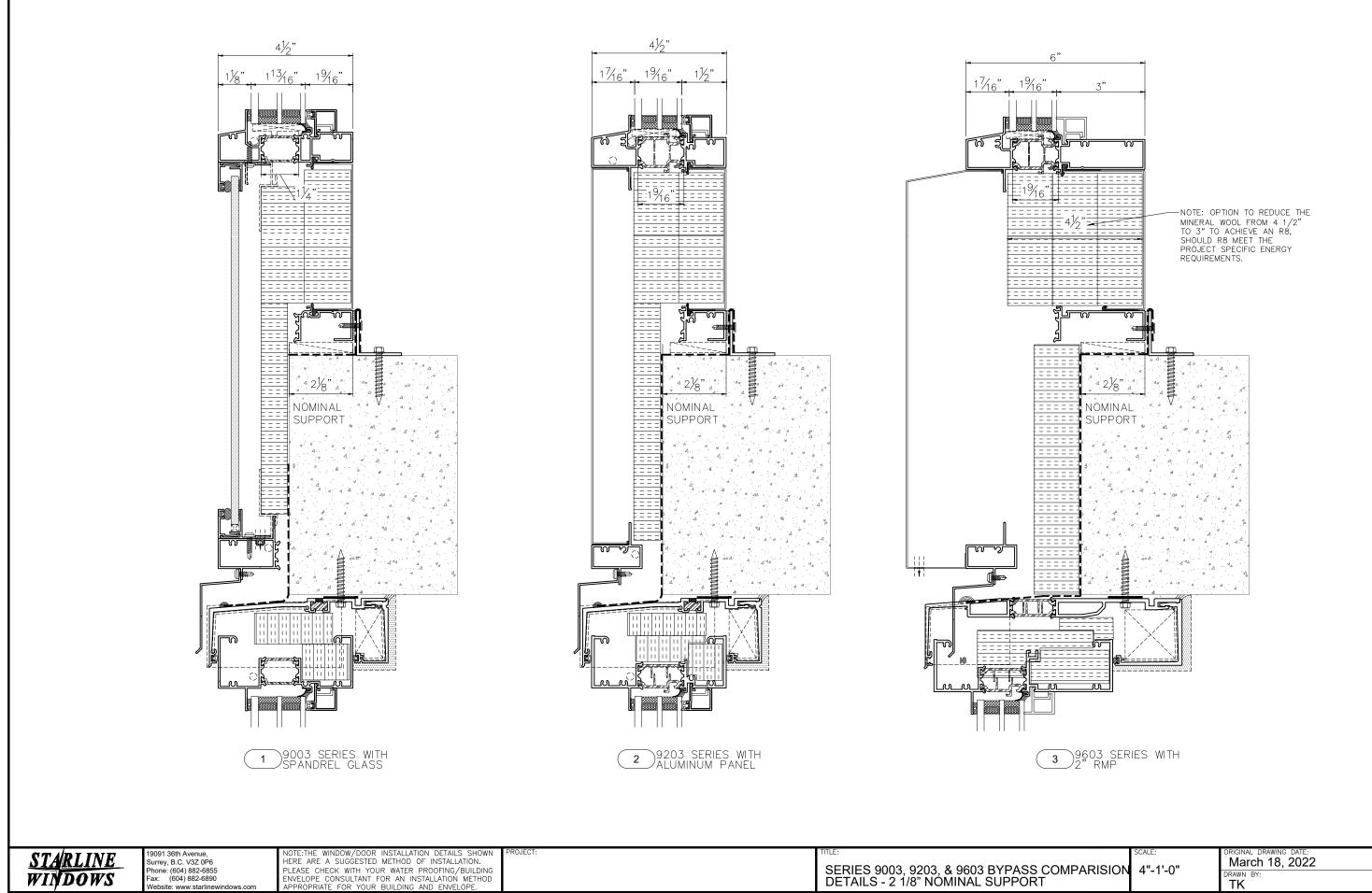
<sup>3</sup> Note: Option to reduce the mineral wool from 4 1/2" to 3" to achieve an R8, should R8 meet the project specific energy requirements.



# Main Differences Between the Series

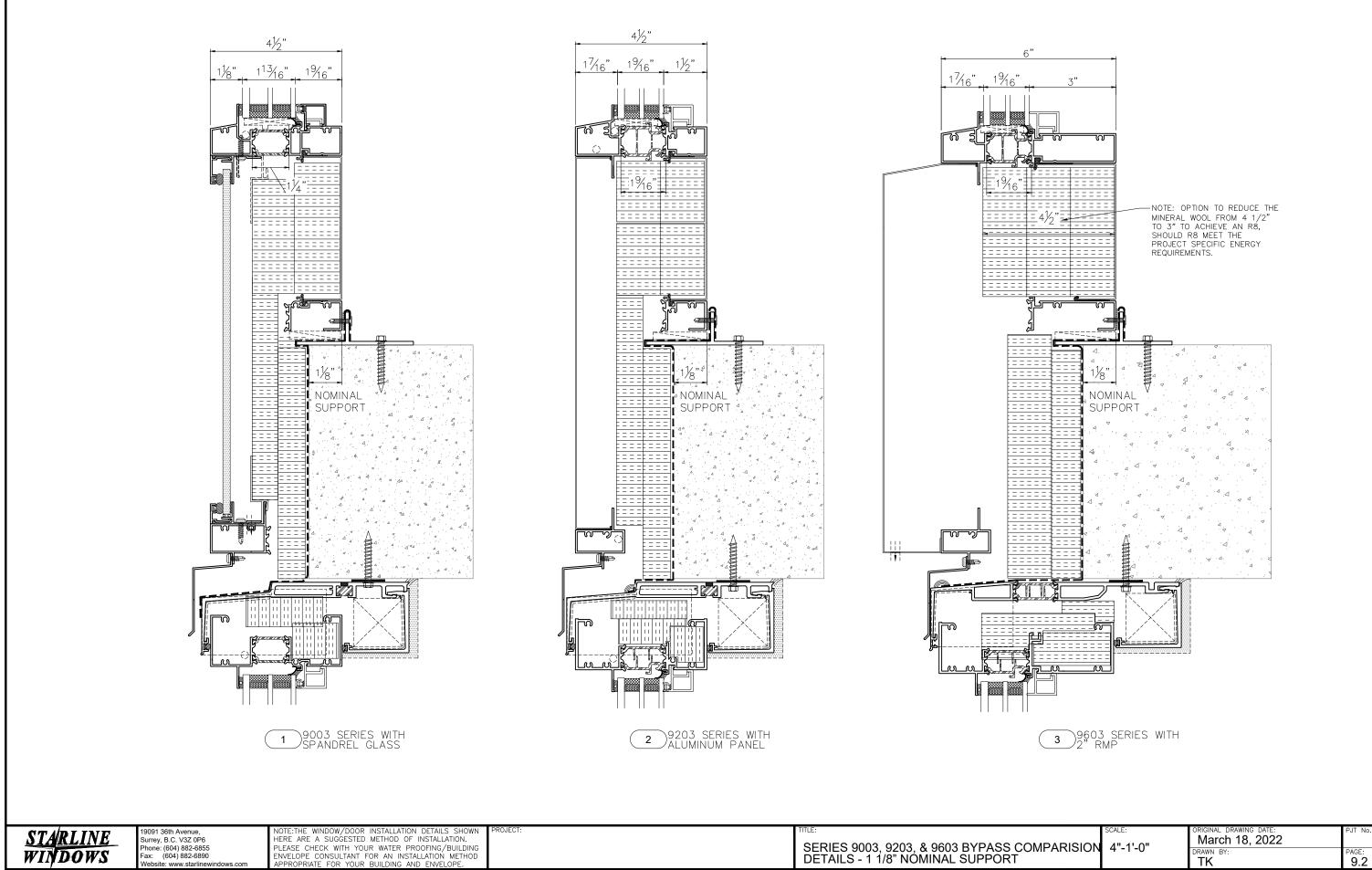
The below table provides the main changes between the series 9003, 9203 and 9603.

9003	9203	9603
1 13/16" (46mm) IGU	1 9/16"" (40mm) IGU	1 9/16" (40mm) IGU
1 1/4" (32mm) Thermal Break (TB)	1 9/16" (39mm) Multi Chamber TB	1 9/16" (39mm) Multi Chamber TB
4 1/2" deep system Exterior face of mullion to IGU = 1 1/8" Interior face of mullion to IGU = 1 9/16"	4 1/2" deep system Exterior face of mullion to IGU = 1 7/16" Interior face of mullion to IGU = 1 1/2"	6" deep system Exterior face of mullion to IGU = 1 7/16" Interior face of mullion to IGU = 3"



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SCALE: ORIGINAL DRAWING DATE: PJT No.:	
MPARISION 4"-1'-0" March 18, 2022	
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TK 9.1	

9.1



	SCALE:		PJT No.:
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9.2