PACE
BUILDING ENVELOPE REPRESENTATIVES

Thermal Requirements Summary

Rigid Continuous Insulation and Metal Stud Back-up
IBC 2021, IECC 2021 + MA Stretch Energy Code

Revised: August 2025

IECC 2021 + MA Stretch Energy Code (Climate Zone 5, All Other Use)						
	Code (IECC 2021 + MA Stretch*)		Proposed Base		Proposed Optimized	
	R-Value	**U-Factor**	**R-Value**	**U-Factor**	**R-Value**	**U-Factor**
Roofs						
Insulation Entirely Above Roof Deck	R-30ci	U-0.032	R-30ci	U-0.032	R-45ci	U-0.022
Walls Above Grade						
Metal Framed	R-13+R-10ci	U-0.055	R-19ci	U-0.050**	R-19+R-19ci	U-0.036**
Slab-On-Grade Floors						
Unheated Slabs	R-15ci	F-0.52	R-15ci	F-0.52	R-15ci	F-0.52
Vertical Fenestration						
Fixed	NA	U-0.36 | U-0.30*	NA	U-0.29	NA	U-0.24
Operable	NA	U-0.45 | U-0.32*	NA	U-0.30	NA	U-0.30

* MA specific requirement.
** U-Factor includes clear field thermal derating as required by MA Stretch Energy Code Section C402.7.