

Platinum CI Stucco

Guidelines for Attaching to Wood or Steel Framed Wall/Sheathing Assemblies

INTRODUCTION

Construction trends and recent Building Codes are driving increased use and thicknesses of continuous insulation (CI) behind all types of above grade exterior wall claddings, including stucco. The added thickness of CI may require changes in the fastener types and mechanisms commonly used to fasten lath in stucco systems.

This bulletin can be used as a guideline for attachment of Platinum CI Stucco systems. Below is the procedure as well as an example for choosing a mechanical fastening system.

FASTENER SELECTION PROCEDURE

Refer to Table 1 and determine applicable fastener based on the following:

1. Framing material, gauge (if steel) and spacing
2. CI thickness
3. Determine appropriate fastener length based on total combined thickness of sheathing, continuous insulation and minimum required penetration into framing

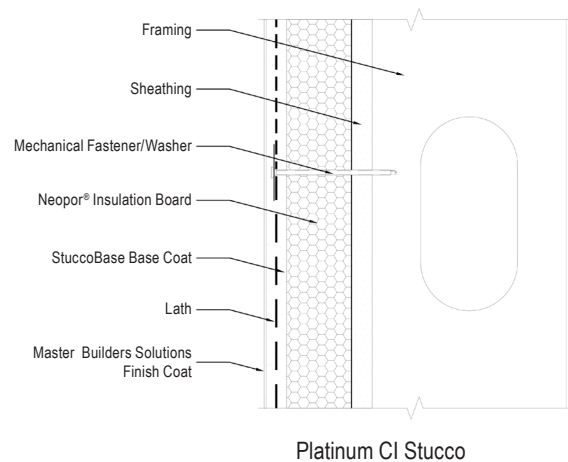


Table 1 – Mechanical Fastener Selection Guidelines

FRAMING MATERIAL	LATH FASTENER TYPE AND DIAMETER	LATH FASTENER SPACING (VERTICAL IN INCHES)	MAXIMUM CI THICKNESS (INCHES)	
			16" O.C. FRAMING/ HORIZONTAL FASTENER SPACING	24" O.C. FRAMING/ HORIZONTAL FASTENER SPACING
Wood Framing (minimum 1-1/4" penetration)	0.113" diameter common nail	6"	1.45"	0.85"
	0.120" diameter comon nail	6"	1.7"	1"
	0.131" diameter common nail	6"	2.15"	1.35"
Steel Framing (minimum 3/8" penetration)	#8 screw into 33 mil steel or thicker (20 ga)	6"	2.95"	2.35"
	#10 screw into 33 mil steel (20 ga)	6"	3.5"	2.9"
	#10 screw into 43 mil steel or thicker (18 ga)	6"	4"	4"

FASTENER SELECTION - EXAMPLE

Proposed Assembly

Framing Material:	Steel
Sheathing thickness: 5/8"	
CI Insulation Thickness:	2-1/2"
Framing gauge :	33 mil
Framing Spacing:	16" on center
3/4" Stuccobase :	Nominal weight 9 psf

Mechanical Fastener/Washer

Select a minimum 3-1/2" long (5/8" sheathing + 2-1/2" CI insulation + minimum 3/8" penetration (per ASTM C 1063) = 3-1/2") #8 screw or #10 screw and corresponding washer

NOTES

- Table based on cladding weight of 11 PSF.
- Fastener Data derived from Quick Guide: Cladding Connections to Steel Frame Walls with FPIS ci and Quick Guide: Cladding Connections to Wood Frame Walls with FPIS ci (<https://www.continuousinsulation.org/cladding-connections>), 2018 & 2021 IBC Tables 2603.12.1 and 2603.13.1 and 2018 & 2021 IRC Tables R703.15.1 and R703.16.1
- All fasteners shall be corrosion resistant and be used with approved washers.
- Guidelines and recommendations take into account vertical load based on stucco weight, CI thickness, etc. Verification of fastening requirements is needed to accommodate wind pressures, racking, etc.
- Contact Technical Services for other thicknesses and applications.

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