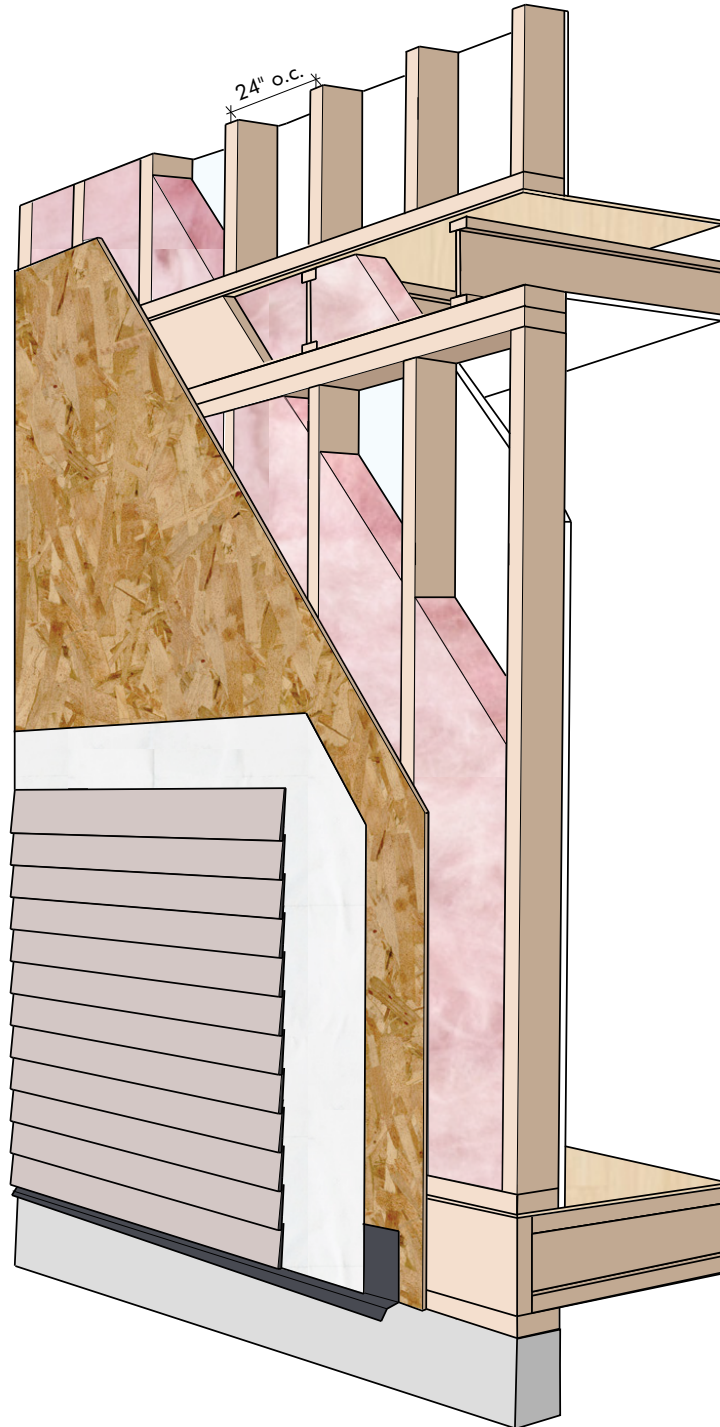


WALL 1E – ALTERNATIVE 2



Notes:

1. Wood structural panels can be installed vertically or horizontally.
2. Provide proper gap between wood structural panel and concrete as per local code requirements and manufacturer recommendations.
3. Nail lines, panel terminations, and flashing depicted in this graphic are for illustrative purposes only. Actual construction details may differ depending on local code and application requirements.

Continued on next page

WALL 1E – ALTERNATIVE 2

OPTION #2

WALL ASSEMBLY #1 – 1E ALTERNATIVE 2

REQUIRED NOMINAL R (RSI): 22 (3.87)

EFFECTIVE R (RSI)	OUTSIDE	NOMINAL R (RSI)
0.17 (0.03)	Exterior Air Film	
0.62 (0.11)	Vinyl Cladding (No Air Space)	
0	Building Paper	
0.62 (0.11)	7/16" (11.1mm) Wood Structural Panel Sheathing	
15.16 (2.67)	2x6 SPF w. R22 batt @ 24" o.c.	22 (3.87)
0	Polyethylene	
0.45 (0.08)	1/2" (12.7mm) Gypsum Board	
0	1 Coat Latex Primer and Paint	
0.68 (0.12)	Interior Air Film	
17.70 (3.12)	INSIDE	22 (3.87)



Complexity

This wall is easily constructed using traditional methods. Trades are familiar with the methods used to construct this wall. Stud spacing at 24" o.c. may require additional bracing if tiles or cabinetry are to be installed against the exterior wall. Note that the number of floors supported may determine the required stud spacing. The structural wood panel may act as a nailing base for the vinyl siding as well as brick tie attachment and may also be used as a substrate for stucco and/or foam plastic sheathing. A wood sheathing panel thickness of 7/16" is recommended to provide adequate racking resistance for the assembly. This assembly works well with the prefabrication process.



Cost

This wall is highly affordable. Trades are familiar with the construction of this type of assembly and do not charge premiums. Overall lumber costs may be reduced by up to 20% by using advanced framing. Advanced framing can also lower the amount of insulation that needs to be added to the assembly.



Moisture Vulnerability

This wall is very durable and has been used successfully for decades by the building industry. The vinyl siding acts as a rain screen and is non-absorptive, helping to avoid solar-driven moisture issues. The wall has excellent drying potential towards the outside. If moisture penetrates into this assembly the wood sheathing will allow it to dry rapidly to the outside. Proper detailing around penetrations such as windows and doors is required to minimize any risk of moisture related issues. On-site construction moisture must also be appropriately managed.