

Penetrations

-Best Practices-



The House as a System (EEBA Builders Guide) www.eeba.org

“Residential Construction is a complex operation including thousands of processes by dozens of industries, bringing together hundreds of components and sub-systems into a house.”



Air Barrier,

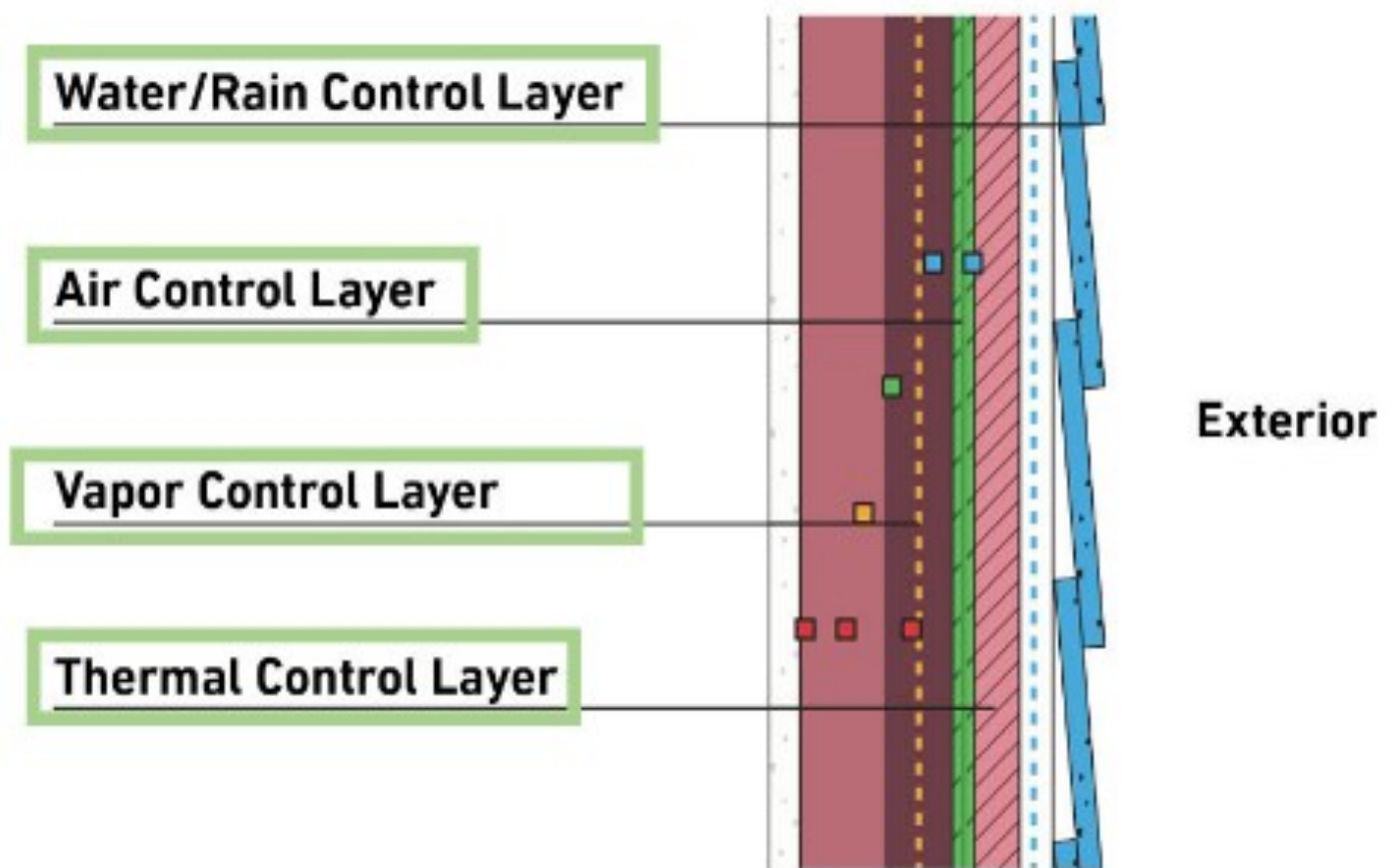
Mechanical,

Lighting,

Insulation,

Foundation

THE BUILDING ENVELOPE



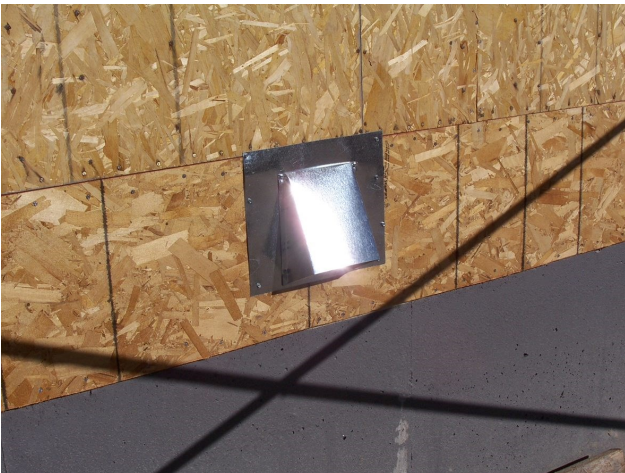
Think of how many different layers you are affecting when you penetrate this assembly. Minimize the amount of holes cut in this assembly and accurately cut around each type of penetration.

TYPES OF PENETRATIONS

PVC



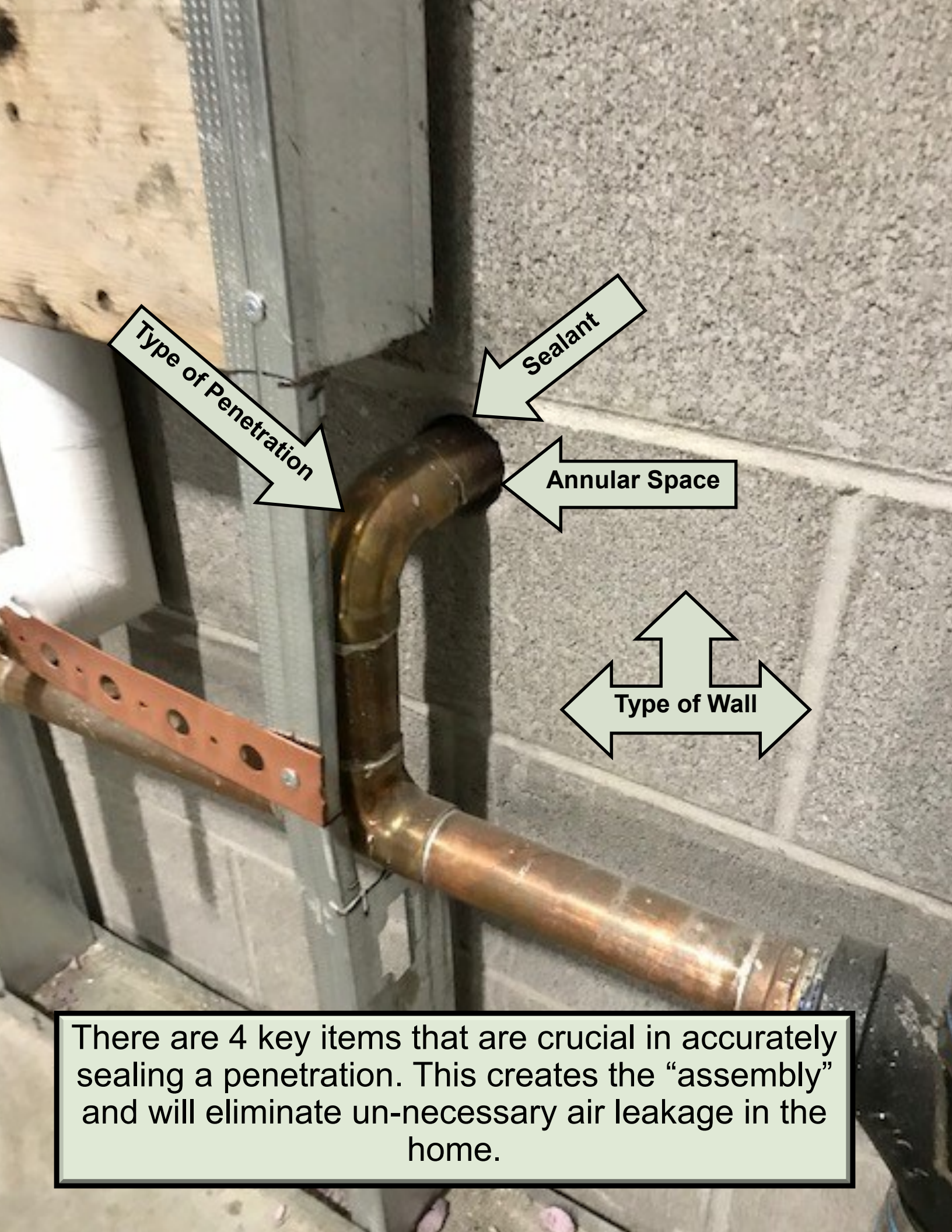
DRYER VENT



RECESSED LIGHTING



JUST SOME EXAMPLES



Type of Penetration

Sealant

Annular Space

Type of Wall

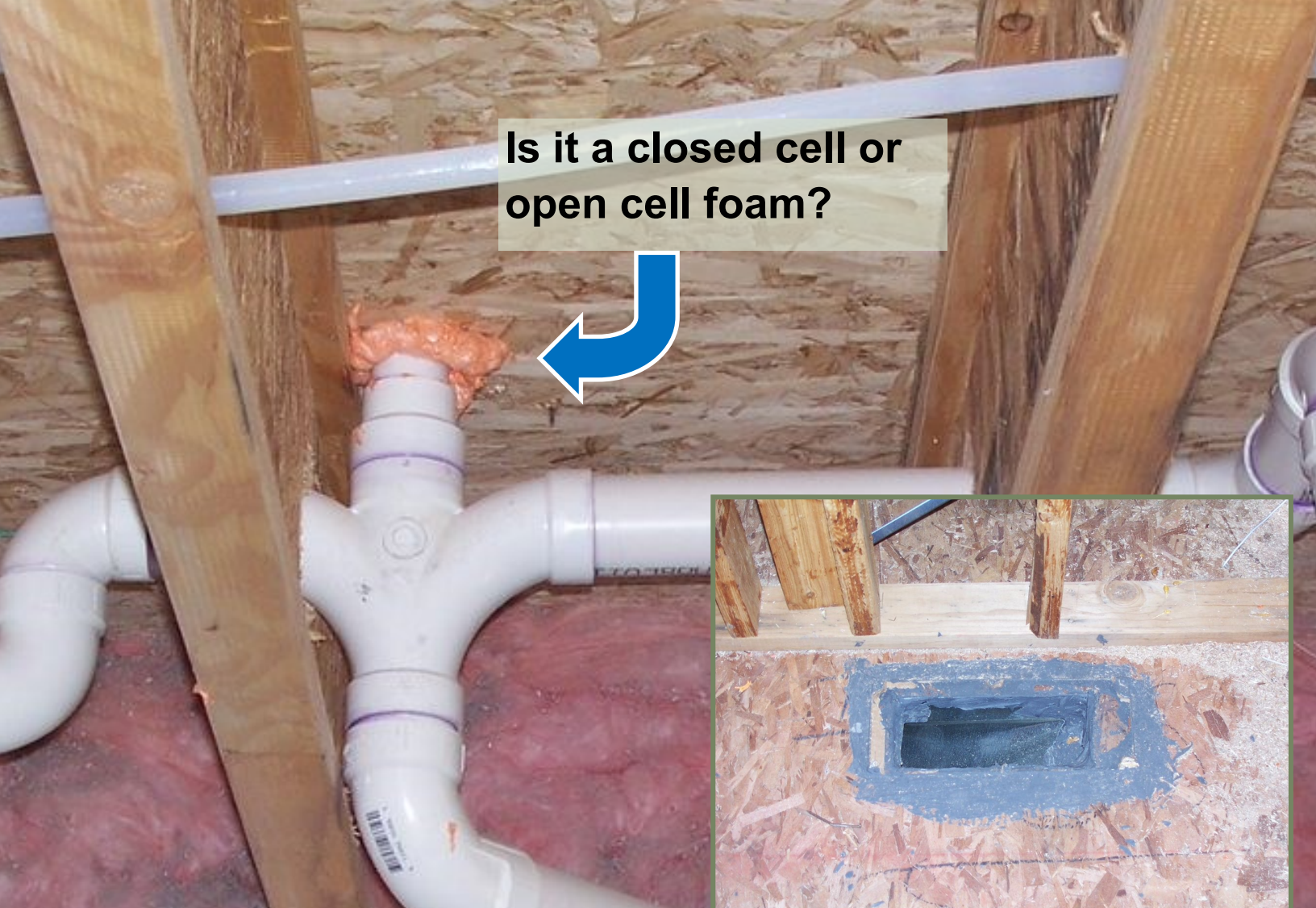
There are 4 key items that are crucial in accurately sealing a penetration. This creates the “assembly” and will eliminate un-necessary air leakage in the home.

Sealing Accurately

Take the time to accurately cut where the penetration will be. This could mean that you are coordinating with your subcontractors and their schedule. Take the time to seal all the way around the penetration efficiently. Fit it right and seal it tight!



Is it a closed cell or
open cell foam?



Is it a rated assembly?
This might require a
specific material or an
engineered judgement
from the manufacturer.

NOT ALL SEALANTS ARE CREATED EQUAL

How They Should be Detailed at Plan Review

