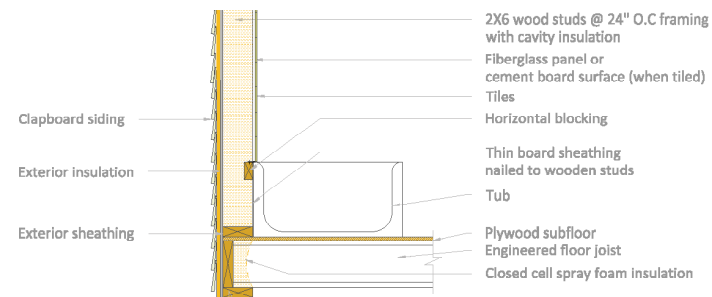


WALLS BEHIND TUBS AND SHOWERS

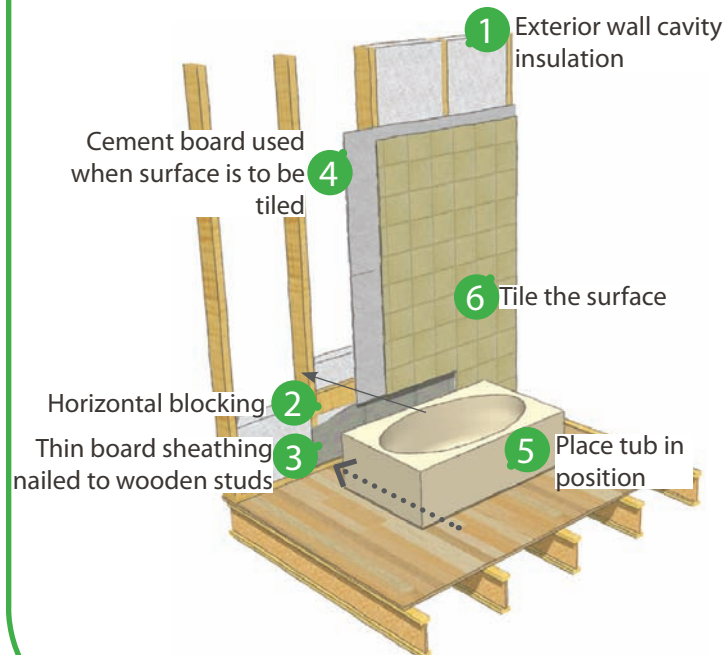
When installing a shower/tub, the builder needs to ensure that an interior air barrier is provided for exterior walls prior to the shower/tub being set. Either the builder or the designated trade (typically the framer) needs to provide the air barrier. This could be as simply as a thin board sheathing product (Thermo-ply or equivalent) or could be rigid insulation or spray foam. If utilizing spray foam, the entire cavity up to the lip of the shower/tub should be filled.



When tiling the shower/tub on an exterior wall, it is recommended that the builder include installation of a thin board sheathing product (Thermo-ply or equivalent) in the framer's scope of work. This would allow the same sequencing of the trades to occur, but a continuous air barrier would be provided on the exterior shower/tub wall prior to the shower/tub being set.



Insulation and Air sealing Sequence



GENERAL NOTES

In most cases, cavity insulation (fiberglass, cellulose, etc.) provide a sufficient thermal barrier assuming that they do not have air flowing through it. This caveat is the reasoning for the six-sided air barrier requirement in EPA's Energy Star Qualified Homes Thermal Bypass Checklist. For the most part this six-sided air barrier is provided by the exterior sheathing, wood framing (vertical studs, top plate, and bottom plate), and interior sheetrock. In the case of shower/tubs on exterior walls or the shaft walls behind fireplaces, the sequencing of trades results in the interior air barrier being commonly voided. This can result in issues with comfort (cold tub surface temperature and higher heating load due to unaccounted infiltration) and moisture (potential condensation concerns).



During a blower door test (depressurizing the house to 50 Pascals), the panel on this tub fell off due to the amount of air that was being pulled from the space behind this tub, so this is clearly connected to the exterior in some manner. In this case, it wasn't an exterior wall, this was a 2nd floor partition wall that was connected to the vented attic through penetrations that were made in the top plate and weren't sealed. It is recommended that all shower/tubs have an air barrier behind the tub regardless if it is an exterior or interior wall.

WALLS BEHIND FIREPLACES

Just like the void behind showers/tubs, it is common for the furred out space behind fireplaces to be missing the interior air barrier. It is recommended that the builder include installation of this air barrier in the framer's scope of work. Again this can be a using numerous products, such as thin board sheathing (Thermo-ply or equivalent) or drywall.



Insulation and Air sealing Sequence

