

## Technical Bulletin: Townhome Air Sealing

Residential New Construction Program

BUILDING A SMARTER ENERGY FUTURE™

Townhome air sealing was one of the top issues found in RNC Program inspections this year. The gaps along core walls in a typical townhome can add up to 250-300 linear feet of cracks, which can account for as much as a **2-4' hole**. This technical bulletin will cover the top tips for air sealing townhome core walls.

### 1. Core (Common/Party) Wall Top and Sill Plates

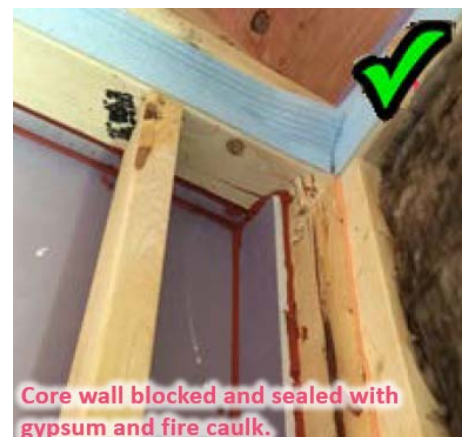
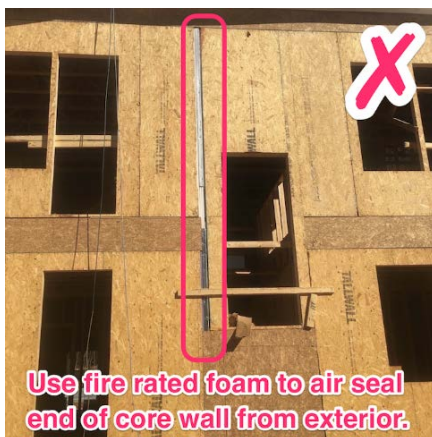
Framing can't touch core walls, but leaving these areas open results in huge openings to attics and interstitial (between floors) areas. These large gaps should be blocked with gypsum board and sealed with fire-rated caulk or foam.



### 2. Core Walls at Fronts and Backs of Homes

The corners where core walls and framed wall connect needs special attention and can be sealed with two methods.

1. Similar to top plate and sill plates, gaps between the core wall and framing members should be blocked at the interior with gypsum board and sealed with fire-rated caulk or foam.
2. Prior to housewrap installation, the framer should seal the core wall to the sheathing with fire-rated flashing tape, caulk, or foam. This method is outside of the standard air sealing sequence but is typically the easiest way of seal gaps along the core wall corners.



**Disclaimer:** Materials touching the core wall may affect the UL rated design. Please contact your local fire code official to ensure your air sealing approach meets local fire code requirements.

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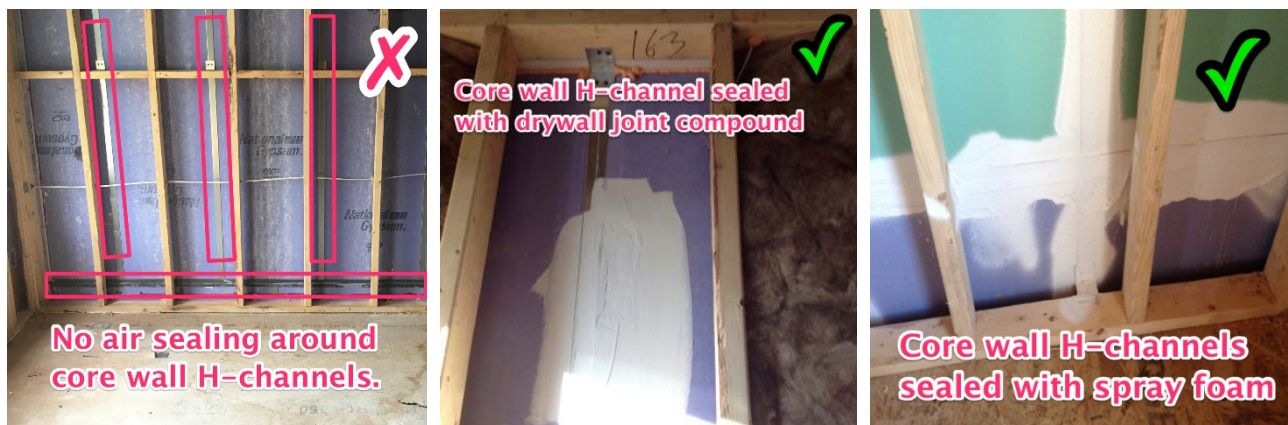
### 3. Band Joists

Rim and band joists areas are often overlooked as they're typically difficult to reach and hidden. Similar to corners, these areas should be sealed from the exterior before housewrap or block and sealed from the interior with gypsum and fire-rated caulk or foam.



### 4. Core Wall Drywall 'H' Channels

While less of a concern than the problem areas listed above, small gaps between H channels and core wall drywall is a source of leakage between units. Using standard drywall tape and mud to seal over these areas will deliver extra air sealing benefits to builders that have already mastered other core wall air sealing details.



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