



Building Industry Institute

BII-SOW

## Quality Caulking and Sealing (Air Sealing) Contractor Scope of Work

**Builder:** Include these materials in your bidding and contracting documents. Work with the architect and framer to minimize air-sealing problems.

**Contractor:** Follow Caulking and Sealing Procedures.

**Field Superintendent:** Review Caulking and Sealing Procedures to check installation quality

### Seal sole plates

- Materials: compressible sealant, caulk, foam, or mastic
- Produce continuous bead or layer of sealant
- Where not certain that continuous bead or layer will be achieved, combine two techniques, e.g., rope caulk under sill followed by penetrating foam after wall is erect

*Note: when "High Quality Installation of Insulation" is selected as a feature in California energy calculations, wall stud cavities must be caulked or foamed to provide an air tight envelop.*

### Seal exterior penetrations

- Materials: foam, caulk, or gasket
- Example openings: plumbing, gas lines, electrical boxes and outlets
- Seal large gaps around windows between house framing and window frame – use special care on large sliding-glass doors and vinyl-framed windows: do not use expansive foam on these.

**Note:** Install caulking and sealing with care to seal all joints without excess sealant. Excess is wasted and must be removed before installing drywall. Care must be exercised during removal of excess sealant after hardening to avoid damage or removal of the required sealant.

### Seal top plate penetrations

- Materials: foam or caulk
- Example openings: plumbing, electrical, cable, security

*Note: when "High Quality Installation of Insulation" is selected as a feature in California energy calcs, all recessed light fixtures that penetrate the ceiling must be IC and air tight (AT) rated plus sealed with a gasket or caulk between the housing and ceiling.*

### Weather-strip exterior doors and other openings to the exterior

- Weather-strip around all doors
- Weather-strip around attic access

### HVAC/Plumbing closet inside conditioned space

- Seal wall penetrations of interior closets for HVAC and/or water heating equipment
- Weather-strip access door(s)

### Raised floors

- Seal around tub and shower drains

### Windows

- Windows must be certified by the manufacturer to limit air leakage to less than 0.37 cfm per operable foot of sash crack.
- Windows should be installed to avoid both air leakage and water penetration – see separate procedures for proper installation of windows.

### Test

- To determine actual air-tightness, a Blower Door test needs to be performed