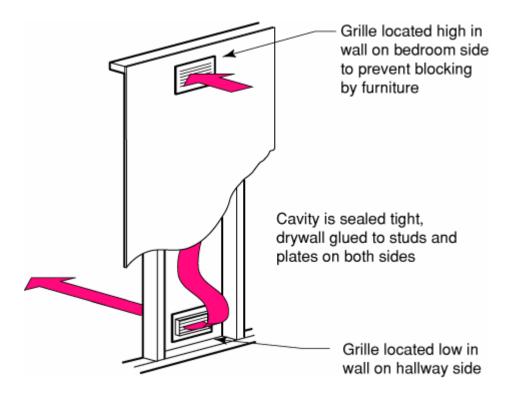
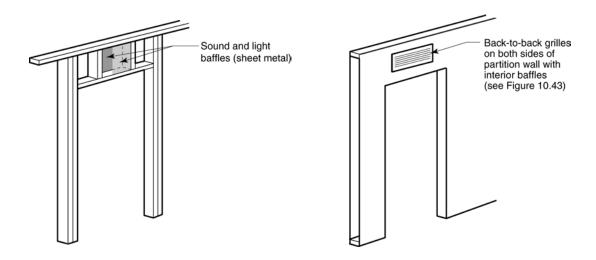
Building Science Corporation

Architecture and Building Science



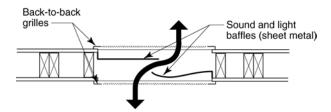
Transfer Grille From Builder's Guide, Building Science Corporation

- All supply registers should have clear access to a return grille in order to prevent the pressurization
 of bedrooms and depressurization of the common area. Bedrooms should either have hard-ducted
 returns, or another means of pressure relief, such as transfer grilles (above) or jump ducts (below).
- Maximum that can be returned by through-the-wall hi-low transfer grille is ~125 CFM, assuming door undercut.
- Door undercut of 1" minimum still required
- Pressurization is especially severe when combining oversized air handlers (e.g., 5 tons in 2000 sf) and large master bedroom suites that can be sealed from the main space with one door. Undercutting the door seldom provides adequate pressure relief.
- Refer to Transfer Grille Sizing Table to compute required free area (and grille size) vs. supply airflow.

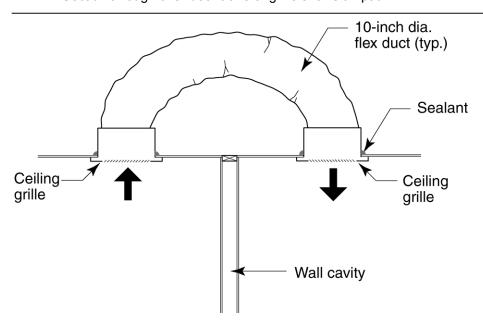


Transfer Grille —Over Door Opening

- Interior baffles (see figure below) control sound and light transfer
- Typically 6x20



• Section through over-door transfer grille shows air path.



- Jump ducts are ducts through attic connecting bedroom to main space or hallway, similar in concept to the transfer grilles.
- Duct sealing measures must be taken if jump duct is routed through vented attic.