

Common Building Flaws

HEC Technologies had indentified typical design flaws resulting in energy related problems:



- 1 Leakage at rim joist, mud sill and sole plates
- 2 Rooms over garages:
 - a. Air flow through floor insulation
 - b. Unsheathed knees walls (wind washing)
 - c. Frozen pipes
 - d. Long duck runs through unconditioned space
 - e. Insufficient supply or return
 - f. Ductwork in outside walls and sloped ceiling
 - g. Access panels leading to unconditioned space behind knee walls
- 3 Brick cantilevers
- 4 Cantilevered floors and cantilevered floors over porches
- 5 Improper fire stopping and insulation of fireplace chases
- 6 Incomplete air barrier behind shower/tub surround and whirlpools
- 7 Interior soffits tied to attics
- 8 Ceiling joist in attics tied into floor house of conditioned space without any blocking
- 9 Unsheathed knee walls and lack of fire blocking at changes in ceiling height
- 10 Air leakage and water intrusion at windows.
- 11 Poorly sealed flu chases and plumbing chases.
- 12 Penetration in ceiling (cans, disappearing stairwells and whole hose fans)
- 13 Ductwork and furnaces in attic
- 14 Main trunk lines located near ridge with long supply drops.
- 15 Hi-lo make up air in furnace rooms
- 16 Use of humidifier in structures that already have excessive moisture levels
- 17 Lack of provision for mechanical ventilation.
- 18 Use of vapor retarders designed to keep moisture out that actually prevent drying.