

Technical Bulletin

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No. 28: Applying Batt Insulation in Open Walls Extending Above Ceilings to Meet Code (Updated 3/05)

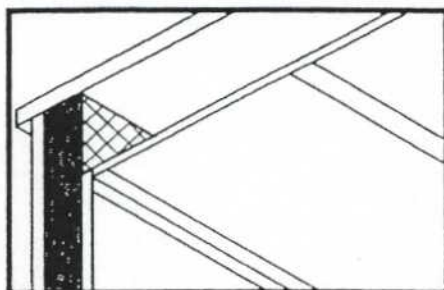
When batt insulation is installed in cavities of open walls that extend up and into the plenum or void above suspended or drywall ceilings in commercial applications, the installation should conform to the fire safety requirements of the prevailing building code. In many commercial jobs, however, code officials approve insulation applications that do not conform to the prevailing building code.


This bulletin addresses and recommends practices known to conform to the requirements of the International Building Code and to all three model building codes including the: National Building Code (BOCA); Uniform Building Code (ICBO); and Standard Building Code (SBCCI).

All requirements for *exposed* applications of insulation for the three model codes are similar and agree to the following conditions:

- Insulation, including facing, shall have a Flame Spread Index = 25 or less and a Smoke Developed Index = 450 or less when tested per ASTM E 84 or UL[®]723. Standard foil-faced and kraft-faced batts do not conform to the requirements of any model code for exposed applications. Their facings have Flame Spread Indices greater than 25.
- The only acceptable application of standard foil-faced and kraft-faced batts is when the product shall be behind, and in substantial contact with, an approved wall construction material as required by the building codes. Substantial contact means that most of the surface of the insulation facing touches the approved wall construction material. Neither inset nor face stapling excludes the substantial contact requirement. If 3½" thick batts are friction fitted into 6" or deeper metal stud wall cavities, supplemental fastening may be necessary to maintain substantial contact. If substantial contact is not maintained and continuous clear access to an open plenum or void exists between the installed batt insulation and an approved non-combustible wall construction material, then an exposed application results.¹
- A flame spread rated facing installed over kraft, standard foil or other non-rated facing does not meet code.
- Poly-wrapped batts usually meet Flame Spread Index = 25 or less, but lack the tear resistance and durability recommended for commercial exposed applications.

¹ Kraft facing is unacceptable in any part of the building in Types I and II construction. ICBO requirement for Types III, IV, and V construction is consistent with this interpretation. SBCCI and ICBO both provide for concealed application allowing a flame spread of up to 75, but the conditions of a "concealed" space are not defined. Most manufacturers print a fire warning label on both kraft and standard foil facings requiring substantial contact for proper application, making the interpretation above correct when a space results.



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