



NATIONAL FIBER
CEL-PAK INSULATION

Professional Cellulose for Cellulose Professionals

Technical Bulletin on Cellulose Insulation and Chimneys, Vents and Recessed Lights

National Fiber's cellulose insulation products should never be installed in direct contact with any combustion appliance chimney, vent or flue pipe, nor against or over any non-IC (Insulated Contact) rated recessed light housings or fixtures.

Most fire codes mandate a minimum two-inch space between combustible materials and masonry chimneys, some types of triple-wall vent pipe, and certain insulated metal vents, such as MetalBest® brand products. For single-wall vent pipe, these minimum clearances to combustible materials increase substantially to 18 inches. For double-wall vents, these clearances are typically reduced to 9 inches for 'Type L' oil and solid fuel vent, and 6 inches for gas 'B Vent'. (Always consult manufacturer's recommendations and regional building codes for specific usage and regulations requirements.)

For non-IC (Insulated Contact) rated recessed light fixtures, the minimum clearance to combustible materials is typically three inches. Any recessed light fixture not identified as 'IC' on its housing should not be considered rated for insulation contact. Airtight enclosures attaining these minimum clearances can be fabricated from drywall, Sonotubes®, etc., and air-sealed to the attic floor over non-IC rated fixtures, allowing cellulose insulation to be blown around these fixtures. NFPA 70 does not allow insulation to be installed over non IC-rated fixtures, so the enclosures should be built high enough such that insulation does not cover them. The most energy efficient fixtures will be rated 'IC Airtight'.

The term 'combustible materials' in this context applies to the cellulose insulation, wood framing and sheetrock. (Even though the cellulose is the only building material treated to resist the spread of fire and is frequently used to improve the rating of fire walls or as fire blocking, it is still classified as a combustible material by the building codes and therefore should not be used in these areas.) An insulation dam is required to maintain the adequate minimum clearances to combustibles and care must be taken so that cellulose insulation does not enter this air space during installation. A physical inspection must be made of the area after installation to ensure that it is free of cellulose. Fiberglass insulation is classified as non-combustible, although its binders vaporize at 250°, making them unsuitable for these high heat areas. Mineral fiber or rock wool is one of the few non-combustible materials appropriate to use in these areas. For energy efficiency and fire safety reasons, chimney chases should not be left open, but should be air-sealed with metal flashing and high temperature caulk.

Minimum clearances to combustible materials are dictated by the manufacturer and your local code requirements. These codes may be more stringent in certain jurisdictions.

For further information, please contact our Technical Manager, Bill Hulstrunk, at technical@nationalfiber.com