

Cellulose Insulation Clearance to Combustibles Requirements

Nature-Tech's ProFiber cellulose insulation should never be installed in direct contact with any non-IC (Insulation Contact) recessed light enclosures, or any combustion appliance chimney, vent or flue pipe. Manufacturer's recommendations or local code requirements may be more stringent and may supersede the clearance requirements outlined below.

Any recessed light enclosure that does not carry an IC "Insulation Contact" rating, must be kept three inches away from cellulose insulation. In many jurisdictions, an airtight enclosure such as a drywall box, or a bucket large enough to maintain these minimum clearances can be air sealed to the attic floor. Since NFPA 70 does not allow insulation to be blown over the top of these enclosures, make these as high as the installation depth of your cellulose. If installing new recessed light fixtures, make sure that they carry the "IC Airtight" designation and install them in an airtight manner to avoid these issues in the future.

The minimum clearance to combustibles requirement for masonry chimneys, some triple wall chimneys and insulated metal vents such as MetalBest® brand products is typically two inches. For double wall vents, Type L (oil) is three inches, and Type B (gas) one to two inches depending upon the vent size. For single wall vent pipes, the minimum clearance ranges from six inches to 18 inches depending upon the fuel type and manufacturer.

Even though cellulose is treated with a fire retardant and recognized in the building codes to be an ignition barrier over foam insulation and as a fire block in walls, it is classified as combustible materials and therefore need to maintain the minimum clearances outlined above with an insulation dam. Before installing the insulation dam, the top of the service cavity around the chimney, vent or flue should be air sealed with metal flashing and high temperature caulk. Next an insulation dam should be constructed higher than the depth of the cellulose being installed. After insulating, this area should be inspected and any cellulose getting past the dam must be removed. In certain jurisdictions, noncombustible mineral fiber may be used to insulate the area between the insulation dam and the chimney, vent or flue pipe, if allowed by your local code official. Fiberglass should not be used, since the binders vaporize at about 250°F, making it unsuitable for these high heat areas.

For further information, please contact our VP of Insulation Technology Bill Hulstrunk at bhulstrunk@nature-tech.com .