

INSTALLATION CLEARANCES

The general rule for the StoveCAT installation is that it should always be installed with a minimum of 18” clearance from all surfaces, combustible or not. ASTM E 136 is the standard for determining combustibility for clearances for the stove pipe / StoveCAT.

Most wall surfaces in the home are gypsum wallboard or drywall. In regard to drywall or sheet rock, the product's paper facing prevents it from passing ASTM E 136. However, because it does have a demonstrated ability to perform in fire rated assemblies, the NFPA has placed it in a special classification called limited-combustible. This category distinguishes gypsum wallboard (sheet rock) from other, more highly combustible products. To qualify as limited-combustible, a material must have a noncombustible structural base or core, a surface less than 1/8 in. (0.3 cm) thickness and a flame-spread rating of 50 or less.

The three national model building codes, (ICBO's Uniform Building Code, SBCCI's Standard Building Code and BOCA's National Building Code), all allow composite materials that meet the NFPA's definition of limited-combustible, to be classified as noncombustible. You are good to go @ 16”.

In the National Fire Protection Association's NFPA 101 Code for Safety to Life from Fire in Buildings and Structures, a noncombustible material is defined as a material that, "in the form in which it is used and under the conditions anticipated, will not aid combustion or add appreciable heat to an ambient fire." Materials are tested for non-combustibility in ASTM E 136 Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 deg. C. The test exposes small samples of the material to a stream of air heated to 750 deg. C, (1382 deg. F). The material is deemed noncombustible if:

- 1) Sample temperatures at no time exceed 780 deg. C, (1436 deg. F).
- 2) There is no flaming after 30 seconds.
- 3) Once the sample loses 50% of its weight, there is no flaming and sample temperatures never exceed 750 deg. C, (1382 deg. F).

ASTM E 136 is an extremely strict test and under its criterion, few building materials qualify as noncombustible. The standard rule for the StoveCAT installation is 18” clearance from ALL surfaces.

Remember **SAFETY FIRST !**