A Brief History Of Calcium Silicate Insulation

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Industrial Insulation

Calcium silicate (sometimes referred to as "calsil") is used to insulate high temperature pipes and equipment and to achieve fire endurance. It is manufactured and sold in three different forms: preformed block; preformed pipe; and board.

Today's calcium silicate manufactured in North America is noted for its high compressive strength, corrosion-inhibiting properties, and high temperature structural integrity. It can withstand continuous temperatures up to either 1200°F (650°C) (Type I, for pipe and block) or 1700°F (927°C)(Type II, fire endurance boards).

Calcium silicate first evolved about 1950 from two earlier types of high temperature thermal insulation: 85% magnesium carbonate and pure asbestos insulation. At one time there were as many as eight manufacturing plants in North America making use of a number of different manufacturing processes.



This newly-manufactured calcium silicate insulation is Thermo-12® Gold from IIG.

When first developed, calcium silicate insulation was typically reinforced with asbestos fibers. By the end of 1972, all North American manufacturers had switched the reinforcing fibers to glass fiber, plant fibers, cotton linters, or rayon. Today, all North-American-manufactured calcium silicate is asbestos-free.

When industrial facilities operators started asbestos insulation abatement programs in the 1970s, asbestos-free calcium silicate was widely used as the replacement material. It came to be used on piping and equipment at oil refineries, petrochemical plants, power plants, steam distribution lines, and for other high temperature applications requiring a high-strength insulation material.

Today, IIG operates the two North American manufacturing plants producing calcium silicate insulation, although there are other plants throughout the world.

To read more about IIG's calcium silicate insulation products, <u>click here.</u>

- See more at: http://www.iig-llc.com/blog/2014/03/history-calcium-silicate-insulation/#sthash.w34uYvRm.dpuf