GYPSUM WALLBOARD

a TempleInland product

Certified Recycled Content Panels

Environmental Benefits. Exceptional Performance

TempleInland®

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Certified Recycled Content Panels

Certified gypsum wallboard delivers rock-solid quality without the rocks.

Temple-Inland has been producing gypsum wallboard since the 1960's. First, we manufactured only from the pure gypsum mined in our Oklahoma quarry. But since 1985 we have been using synthetic gypsum as the core of some of our wallboard. Now, our wallboard manufactured with a synthetic gypsum core has been certified to contain recycled materials for a truly environmental choice.

Yet this new benefit comes with no additional costs. Our certified wallboard offers the outstanding performance you expect from Temple-Inland but it's environmental benefits make it a little more green. So it's good for interior and exterior environments. Plus, it's available in a wide variety of formulations to match your toughest specifications.

Offering performance characteristics identical to wallboard manufactured with mined gypsum, this wallboard is continuously available and cost efficient while offering peace of mind. Plus, it is available for distribution throughout the eastern half of the United States.

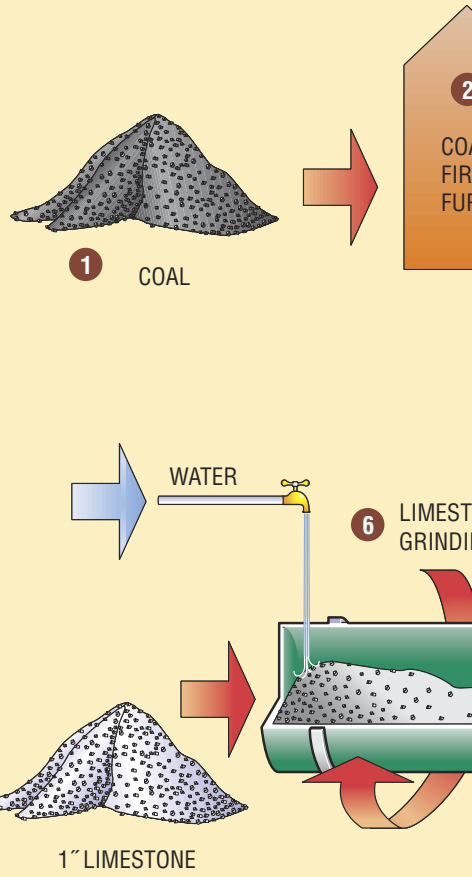
The synthetic gypsum we use is created from byproducts of pollution control systems during the energy generation process at the Tennessee Valley Authority's coal-burning power plant at Cumberland City, Tennessee. This process annually removes approximately 1.2 million tons of materials from the waste stream that would have been placed in landfills, and reduces sulfur emissions, a precursor to acid rain, by over 96 percent.

Due to the pollution-control technology, we have a reliable supply of high-quality gypsum that also reduces the need for mined gypsum. The synthetic gypsum is a chemical equivalent to natural gypsum and has a smaller, more consistent particle size than previously available.

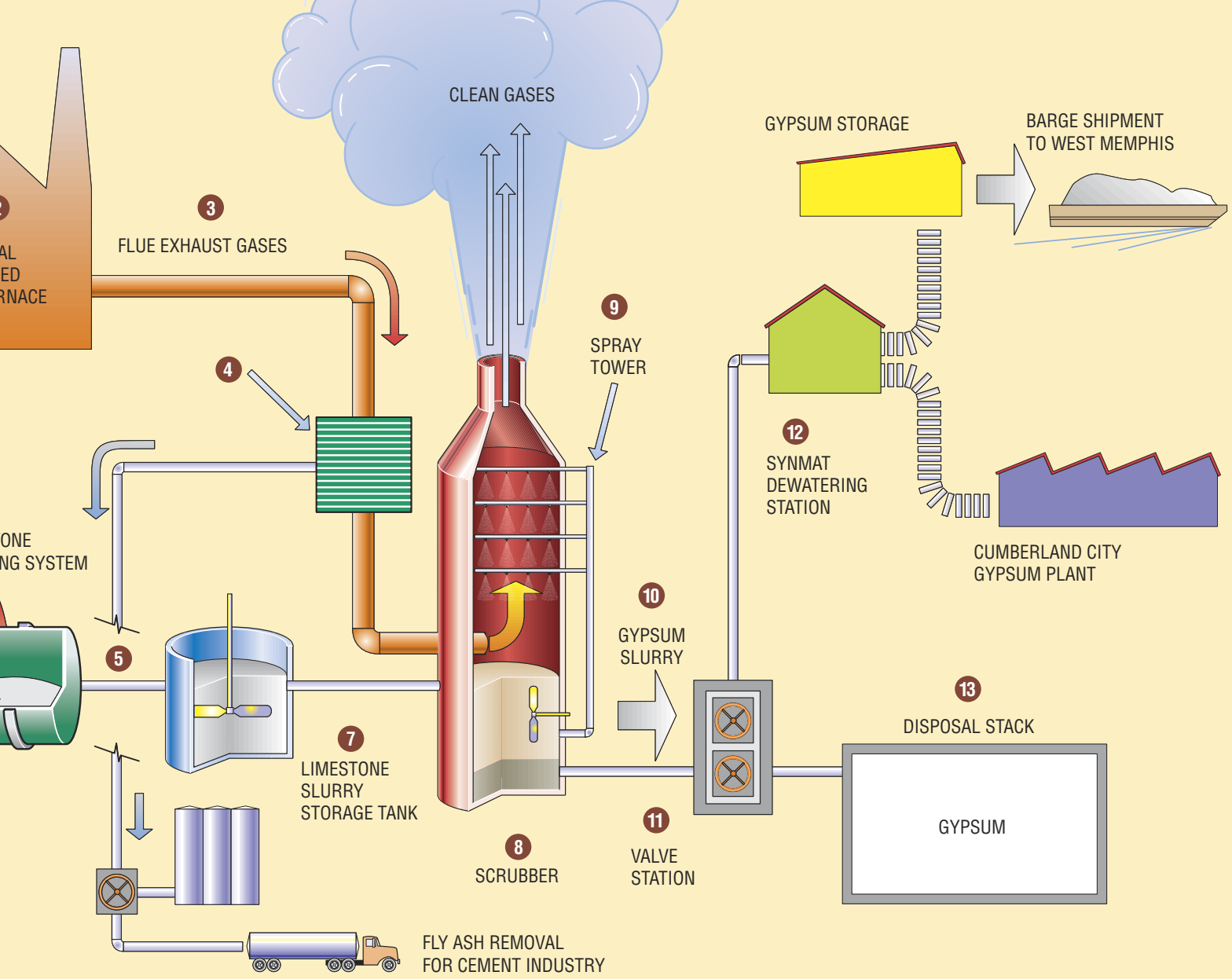
Scientific Certification Systems (SCS) has certified that our regular gypsum wallboard contains at least 99 percent recycled material on a dry weight basis — other formulations contain at least 95 percent recycled material. You can't get much greener than that.*

This certification highlights our commitment to setting new standards for environmental responsibility while delivering top-quality products that meet or exceed the highest standards. So it's no wonder our wallboard is ready for the toughest project requirements, and it is also why our product line continues to grow and demand remains strong.

*On a dry weight basis, the recycled material is: 93.3% post-industrial and 5.8% post consumer for regular; 91.1% and 4.8% for fire rated; 95.2% and 4.0% for other types.



SCS **Certified Wallboard** manufactured with synthetic gypsum is good for interior and exterior environments.



HOW SYNTHETIC GYPSUM IS FORMED

1. Coal is pulverized into a fine powder.
2. Coal powder is blown into the furnace and burned. During the burning process, the coal is mixed with air and the combustion process releases all of the chemicals as well as the unburned dirt and clay locked up in the coal. Ash is formed from the unburnable portion of the coal.
3. Some of the chemicals, such as sulfur, are released and the unburned dirt and clay are carried through in the flue gas.
4. Fly ash is collected in the precipitators by electric currents that attract the ash to wires.
5. Fly ash falls into hoppers and is removed and stored in silos for use by the cement industry.
6. Limestone rock (or calcium carbonate) is finely ground with water to form a slurry.
7. Limestone slurry is stored so that it can be pumped to the scrubber as needed.
8. Limestone slurry is converted to gypsum slurry in the scrubber.
9. Limestone slurry is delivered as a fine spray near the top of the scrubber where it comes in contact with the flue gases from the furnace. Due to the sulfur content of the coal burned, these flue gases contain sulfur dioxide as a gas. The limestone slurry reacts with the sulfur dioxide in the flue gases to form calcium sulfite initially. Air forced through the system forces the chemical reaction from calcium sulfite to calcium sulfate, which is chemically the same as natural rock gypsum. As crystals of calcium sulfate or gypsum form in the scrubber, these heavier crystals sink toward the bottom of the tank where they are continuously pumped out into the effluent slurry tank.
10. The gypsum slurry is pumped through a series of lines.
11. Valve station where the gypsum slurry can be routed.
12. Synthetic materials processing plant where slurry can be de-watered on a series of vacuum belt filters.
13. Storage area.

SCS is an independent third-party certifier. SCS was established in 1984 as the nation's first third-party certifier for testing pesticide residues in fresh produce. In the past 15 years, the company has evolved to become a certifier of multiple facets of the food industry and of the environmentally sound management of forests, marine habitats and a wide variety of businesses.

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