

Fluorocarbon-Free Rigid Urethane Foam Insulation • • • • •

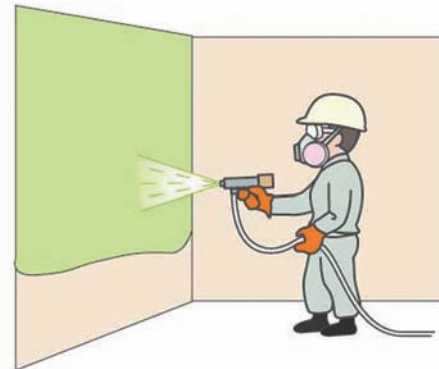
There are two types of rigid urethane foam: sprayed on site (Sprayed-Type) and formed in factories (Pre-formed). Fluorocarbon-free products are commercially available for both types.

Fluorocarbon-free sprayed-type rigid urethane foam

An insulation layer is formed and integrated with the building materials by using a blowing agent on site, taking advantage of the product's self-adherence properties.

Fluorocarbon-free sprayed type rigid urethane foam includes the method of spraying CO₂ directly as a blowing agent and the method of reacting chemical substances with water to produce CO₂ to create foam.

As a sprayed-type, the foam does not have joints, which are a cause of heat loss, and is quick and simple to install, this type represents a major part of rigid urethane foam insulation. However, fluorocarbon-free sprayed-type insulation represents around just 10% of the domestic market.



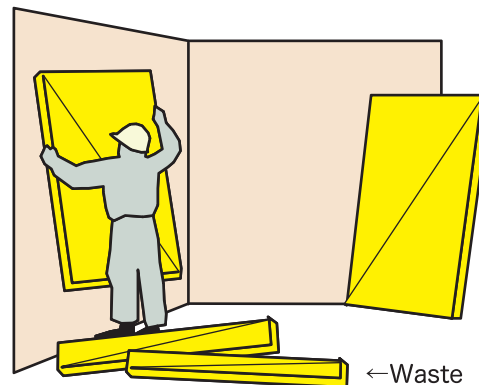
Application on site

< Usage Example >

Housing complexes and factories etc.

Fluorocarbon-free pre-formed rigid urethane foam

At the factory compounds such as cyclopentane are reacted with urethane to create foam. The shipment amount of pre-formed foam is less than that of site-applied foam, most of the factory-made foam has now been replaced with fluorocarbon-free alternatives.



←Waste

Boards are attached to concrete walls



※For Sprayed-type rigid urethane foam, since fluorocarbon-free products have a lower insulation performance than fluorocarbon-based products, a thicker layer is required. Also, for both sprayed-type and pre-formed rigid urethane foam, special treatment and equipment is required in some cases, leading to relatively higher cost at present.