

# **T-FIT®** Technical Insulation

Potential contribution of T-FIT® Technical Insulation towards Prerequisites and Credits as defined in the LEED v4 requirements



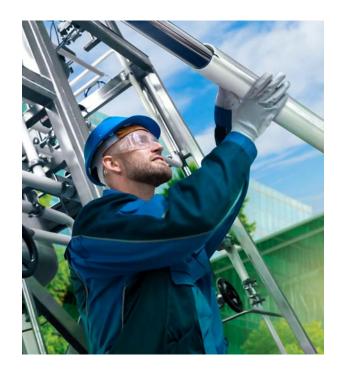
Fit to perform. Fit to last



Leadership in Energy and Environmental Design (LEED®) is a green building rating system developed by the U.S. Green Building Council (USGBC) that assesses and certifies the sustainability credentials of buildings. Within the LEED framework, there are nine categories which contain prerequisites and credit scoring requirements. T-FIT® Technical Insulation products are able to provide several sustainability benefits that may help contribute towards fulfilling some of these prerequisites and earning credits in some categories.

The information in this document is provided only as guidance to indicate potential contributions that T-FIT® Technical Insulation can make towards meeting LEED performance criteria. It does not imply any certification or approval from the LEED green building program or the USGBC.





## **Energy and Atmosphere (EA)**



Minimum energy performance

**Prerequisite** 

## Requirement

To promote resilience and reduce the environmental and economic harms of excessive energy use and greenhouse gas emissions that disproportionately impact frontline communities by achieving a minimum level of energy efficiency for the building and its systems

### **Achievement**

T-FIT® Technical Insulation products can contribute towards energy savings for pipework and HVAC systems.



Optimise energy performance

Credit 1-25 points

## Requirement

To achieve increasing levels of energy performance beyond the prerequisite standard to reduce environmental and economic harms associated with excessive energy use and greenhouse gas emissions that disproportionately impact frontline communities

## **Achievement**

T-FIT® Technical Insulation products can contribute towards enhanced levels of energy savings for pipework and HVAC systems. The ease of installation and low profile enables insulation of tightly installed pipes in restricted spaces and in similarly difficult to access areas, which can provide an enhanced level of energy saving.



## Materials and Resources (MR)

Building life-cycle impact reduction – whole-building lifecycle assessment

Credit 1-4 points

#### Requirement

To encourage adaptive reuse and optimize the environmental performance of products and materials

#### **Achievement**

T-FIT® Technical Insulation can contribute towards reducing the global warming potential of a building by increasing energy efficiency, allowing for less energy to be consumed. T-FIT® Insulation also offers significantly enhanced durability compared to alternatives, and as such can last much longer, reducing energy and material consumption in maintenance and replacement.

In terms of carbon reduction and usage, estimates indicate 6.5 kgCO $_2$ e are consumed to produce 1m of T-FIT insulation at 2" dia. and 1/4" thickness compared to 1,497 kgCO $_2$ e saved in 10 years use. T-FIT products meet the SASB (Sustainability Accounting Standards Board) definition for increasing use-phase resource efficiency as, through use, T-FIT insulation can be shown to improve energy efficiency, eliminate or lower greenhouse gas (GHG) emissions, & reduce raw materials consumption.

Building product disclosure and optimization - material ingredients

Credit 1-2 points

### Requirement

To encourage the use of products and materials for which life-cycle information is available and that have environmentally, economically, and socially preferable life-cycle impacts. To reward project teams for selecting products for which the chemical ingredients in the product are inventoried using an accepted methodology and for selecting products verified to minimize the use and generation of harmful substances. To reward raw material manufacturers who produce products verified to have improved lifecycle impacts

#### **Achievement**

T-FIT® Technical Insulation does not contain any substances on the REACH Substances of Very High Concern (SVHC) candidate list. As such, use of T-FIT® Insulation can contribute towards earning credits for Material Ingredients through the 'International Alternative Compliance Path'.

T-FIT products meet the SASB (Sustainability Accounting Standards Board) definition for increasing use-phase resource efficiency as, through use, T-FIT insulation can be shown to improve energy efficiency, eliminate or lower greenhouse gas (GHG) emissions, & reduce raw materials consumption.



Construction and demolition waste management – reduction of total waste material

Credit 2 points

#### Requirement

To reduce construction and demolition waste disposed of in landfills and incineration facilities through waste prevention and by reusing, recovering, and recycling materials, and conserving resources for future generations. To delay the need for new landfill facilities that are often located in frontline communities and create green jobs and materials markets for building construction services

#### **Achievement**

Because of its longevity and durability, T-FIT® Technical Insulation will last significantly longer than alternative systems, reducing the need for replacement and therefore reducing the waste generated. The durability and ease of installation also means that parts are less likely to be damaged during installation, meaning less waste is generated.

## Indoor Environmental Quality (EQ)

# Low-emitting materials

Credit 1-3 points

#### Requirement

To reduce concentrations of chemical contaminants that can damage air quality and the environment, and to protect the health, productivity, and comfort of installers and building occupants

#### **Achievement**

T-FIT® Technical Insulation produces very low VOC emissions, and has passed the California Department of Public Health regulation CDPH/EHLB/Standard Method C1.2. (Jan 2017) \* .

In addition, T-FIT Technical Insulation has been tested and certified to VDI2083 Part-17: Cleanroom technology: Compatibility of materials with the required cleanliness.

\* Full report available upon request

# Indoor air quality assessment

Credit 1-2 points

#### Requirement

To establish better quality indoor air in the building after construction and during occupancy to protect human health, productivity, and wellbeing

#### **Achievement**

T-FIT® Technical Insulation has very low VOC emissions, so will not make significant contribution to the total VOCs. It does not produce carbon monoxide or ozone, so it will not contribute to these contaminants. T-FIT is not expected to produce particulate matter.





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Quality FM 01870 ISO 9001:2015





Environment EMS 36270

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