5 reasons to use Thermafiber Insolutions

Ever find yourself in one of these situations with your high-rise project? Thermafiber Insolutions can help—and all consultative services are free:

1. All-phase consultation. You need an engineering judgment, accurate CAD drawings or a knowledge base of building codes and insulation application techniques.

2. High-Performance Products. You need insulation that withstands the highest heat for the longest time—prioritizing life safety while saving energy and reducing sound.

3. Cost-Saving Insulation Hanger Systems. You're frustrated with impaling pins and want a method that makes insulation positioning faster, more accurate and safer by locking fire barriers into place.

4. Labor-Saving Customization and Packaging. You have better uses for your time and labor than cutting insulation into special sizes and shapes and ensuring that the right pieces get to the right places.

5. The Greenest Commercial Insulation You Can Get. You're pursuing "greener" building practices, such as LEED credits or using mineral wool insulation that meets the EPA recommendation of at least 75% recycled content.

For additional information about Thermafiber products, contact your dedicated field representative. Call 1-888-834-2371 or visit www.thermafiber.com.

In multi-story buildings, fire containment isn't just important—it's sometimes a matter of life or death. Thermafiber tests its curtain wall fire-containment systems and insulation products every year to ensure that they withstand the highest heat for the longest time.

One-stop LEED Calculator

No more calling every manufacturer. Just enter the materials you plan to use and the location of your job site, and the calculator generates a letter estimating your LEED credits. It's free. Just go to **www.thermafiber.com.**

WHEN PERFORMANCE MATTERS™

*Reed Construction Data, July 2008

Thermafiber Inc.
3711 Mill Street
Wabash, IN 46992
Toll Free: 888-834-2371
Toll: 260-563-2111
Fax: 260-563-8979
E-Mail: info@thermafiber.com
www.thermafiber.com

Made in the USA

No two are ever the same

That's why we created

Thermafiber Insolutions™

Thermafiber®
THE NAME IN MINERAL WOOL®

Case Studies

Since 1934

Insulation solutions as unique as your building

You must meet the **International Building Code**. And your **deadlines**. And your **budget**. But you also want your building to reflect your unique vision and fulfill its aesthetic potential. What happens when those wants and needs conflict? When your design doesn't mesh with listed perimeter fire-containment assemblies?

Thermafiber Insolutions

Thermafiber Insolutions provide fire-containment systems matching your building's design, resulting in easier understanding and approval by local planning commissions. Precise CAD details also aid in installation, inspection and approval. All consultative services are free. We protect your building by customizing our five-step approach:

1. All-Phase Consultation

2. High-Performance Products

3. Cost-Saving Insulation Hanger Systems

4. Labor-Saving Customization and Packaging

5. The Greenest Commercial Insulation You Can Get

No charge

Our Insolutions accompany every product we sell, from start to finish. We don't separate our services from our products. That would just be insulation—not an **Insolution**.

Thermafiber incorporated its time-saving insulation hanger systems into a customized attachment plan for the 555 Mission Street project in San Francisco.

Case Study 1:

No room for a backer bar? No problem

Project Overview: 34-story office building at 555 Mission Street, San Francisco.

The Challenge: As is often the case, the curtain wall design did not match any fire-containment assemblies listed by UL or Intertek™. In addition, the vision glass sill ran along the slab top, instead of the typical 2 to 3 feet above the slab top. Such an arrangement prohibited the use of a backer bar.

Thermafiber Insolution: We designed a customized mechanical attachment plan. It included a detailed layout of horizontal Impasse® Insulation Hangers, which combined with the sill to nullify the backer bar issue. Finally, Thermafiber issued an engineering judgment to address the IBC code requirement for perimeter fire containment.

Architectural results:

- Retain aesthetics
- Eliminate need for design revisions
- Engineering judgment for two-hour fire rating
- Obtain desired LEED® rating

Construction results:

- Reduce labor for fire-containment installation
- Reduce overall installation costs
- No modifications to other building systems

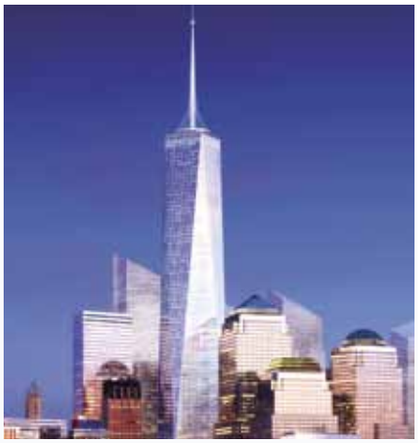
Insolutions applied:

1. All-Phase Consultation

2. High-Performance Products

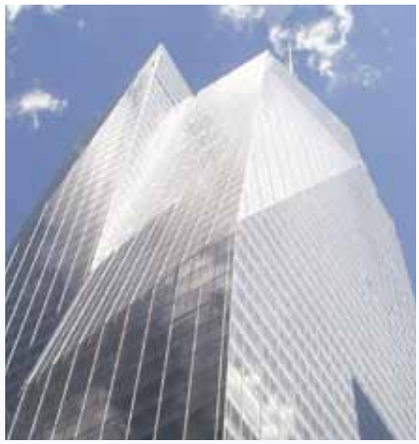
3. Cost-Saving Insulation Hanger Systems

5. The Greenest Commercial Insulation You Can Get



For One World Trade Center in New York City, Thermafiber teamed with the curtain wall manufacturer to modify the mullion design.

Image courtesy of Skidmore, Owings & Merrill LLP



Thermafiber's fire-containment system provided Bank of America Tower with fire, sound, thermal and green performance.

Case Study 2:

Mullion modification, moisture control

Project Overview: One World Trade Center, a 108-floor, 2.6-million-square-foot high-rise in New York City.

The Challenge: One World Trade Center's (formerly Freedom Tower) glass panels span the floor-to-floor height (more than 13 feet) with no intermediate mullion, typically used for insulation hangers. Plus, the wet mullion system required sealing all mullion penetrations for moisture-control purposes.

Thermafiber Insolution: We worked with the curtain wall manufacturer to modify the mullion design. Our engineers made Impasse hangers and customized an approved insulation system to fit the modifications. The use of Impasse hangers—instead of impaling pins—reduced the mullion penetrations, saving labor and preserving the integrity of the moisture-control system.

Architectural results:

- Retain aesthetics of a landmark building
- Meet or exceed stringent New York City fire code
- Cost-effective system with integrity

Construction results:

- Simple attachment to vertical mullion
- Fewer mullion penetrations
- Custom-fit spandrel insulation and Impasse hangers

Insolutions applied:

1. All-Phase Consultation

2. High-Performance Products

3. Cost-Saving Insulation Hanger Systems

4. Labor-Saving Customization and Packaging

Case Study 3:

Green high-rise with a need for LEED®

Project Overview: 54-story Bank of America Tower at One Bryant Park, New York City.

The Challenge: Bank of America Tower aspired to be the first high-rise to achieve the U.S. Green Building Council's Platinum LEED certification—the highest available.

Thermafiber Insolution: Thermafiber provided a perimeter fire-containment system that protects the occupants while also enhancing thermal comfort, energy savings, sound control and indoor air quality. With up to 90% recycled content, the fire-containment system qualified for LEED Materials and Resources Credits 4.1 and 4.2 (recycled content) and 5.1 and 5.2 (regional materials). It also qualified for LEED Energy and Atmosphere Credit 1 (energy performance).

Architectural results:

- Valuable LEED credits
- Lower operational costs over life of building
- Third-party certification of recycled content**
- Safe, quiet and comfortable building

Construction results:

- Easy to fabricate and install
- Fire, sound, thermal and green performance in one product
- Confidence in a product proven to protect lives

Insolutions applied:

1. All-Phase Consultation

2. High-Performance Products

5. The Greenest Commercial Insulation You Can Get

**Expected by mid-2010