TechClad
Installation Guide

Insulated MgO Cladding System

Table of **Contents**

Getting Started: **Pre-Installation**

The following pages are a guideline for best practices to maximize the effectiveness of TechClad applications. Because this product has many uses, no installation will be the same.

Important **Safety Note:**

Practicing SAFE work procedures are vital to preventing injury. SAFE work procedures should always be accompanied by proper training. If you have questions about the safe work procedures or practices used in your workplace, don't be afraid to speak up and ask questions. Remember, workplace injuries are preventable.

Training and Safety Procedures are the responsibility of the builder/installer of TechClad.

What's Included in a **Typical ZS2 Package?**

✓ ZS2 TechClad product

✓ Optional: Mechanical fasteners for TechClad

NOTE: Anything not listed above is the responsibility of the installer.

Review the **ZS2 Delivery Checklist**

It is the responsibility of the on site installation team to review the shipped contents and report any discrepancies to the ZS2 TechPartner Project Manager asap.

☐ Confirm TechClad is all accounted for.

☐ Check for damage. Report all damage with photos and description to your ZS2 TechPartner Project Manager within 48 hrs.

Best **Uses**

As part of the building envelope, TechClad provides a comprehensive cladding solution designed to enhance thermal performance, fire protection, and structural integrity. This versatile system integrates magnesium oxide (MgO) sheathing with a variety of insulation options, allowing it to meet the specific needs of any project.

On-site flexibility: TechClad panels are easy to cut and modify on-site, enabling efficient adjustments to fit specific design and installation requirements, including multi-story applications. This flexibility simplifies installation across different building heights and configurations without compromising performance, ensuring that the system delivers consistent protection and thermal efficiency across all levels of the structure.

Storage & **Handling**

All materials should be delivered and stored in their original unopened package and stored in an enclosed shelter providing protection from damage and exposure to the elements.
Follow the guidelines below to ensure easy installation:

✓ Store TechClad on a flat surface with supports placed at least 4'-0" on center.

✓ Store TechClad flat as well as off the ground and undercover. Use sufficient supports extending under the entire length of TechClad to prevent sagging.

✓ Avoid water exposure during shipping, handling, storage, installation, and after installation of TechClad.

✓ If exposed to water, allow TechClad to dry and climatize to site conditions.

✓ Adequate ventilation shall be provided to carry off excess moisture.

✓ Do not apply TechClad with visible signs of moisture. Do not apply TechClad over other building materials where conditions exist that are favorable for mold growth as TechClad can absorb moisture from the material.

Installation **Guidelines**

ZS2 products can be used for multiple purposes but it is the responsibility of the Architect, Engineer of Record, Specialty Engineers, Contractor and Authorities Having Jurisdiction to ensure that building codes are met.

The following is a list of ZS2 recommendations:

- Double check you have the appropriate lifting methods for installation - Examples: lifting sling, crane, zoom boom

- Recommended stud spacing is 406 mm (16") o.c.; Maximum stud spacing is 610 mm (24") O.C.

- Optimal gap between pieces of TechClad is 1/8"(3mm) gap, with a tolerance of ± 1/8".

- Cement board screws, stainless steel staples, stainless-steel wood screws, or coated wood screws with a minimum salt spray coating of 800 should be used with a maximum spacing of 6"(152.5mm) O.C.
  - ZS2 will provide fasteners if specified in the contract phase.

- Fasteners should be no closer than 11mm or 7/16" to the edge of the board. This reduces the chance of material blow out and provides the best finish. If using screws its good practice to predrill holes.

- Staples and screws should be installed flush with the cladding panel surface to ensure firm contact with the substrate. Do not overdrive fasteners or drive fasteners the cause breakage of edge

Modifying **TechClad™ on Site**

Cutting
Any carbide-toothed wood blade is acceptable for cutting TechClad panels. The sharper the blade the cleaner the cut.

Replacing
For damage that is too large to repair, including holes through the TechClad, contact your ZS2 representative for a replacement. Replacement boards must be no less than 24" wide. Add blocking at the TechClad panel seams to support edges.

Patching & **Repair**
Small divots and imperfections can be patched with an elastomeric patching compound that is intended to be used over concrete/masonry substrates. Follow manufacturer's patching compound recommendations for gap filling limitations and applications.

Finishing **Up**

1. If necessary, seal all penetrations in the TechClad after plumbing and electrical are in place with expanding foam sealant, including electrical, plumbing and HVAC.

1. Roof TechClad should be weatherproofed in a timely manner if you are unsure of your timeline please consult your ZS2 contact for direction.

1. TechClad is not a weather barrier. It's designed to enhance thermal performance, fire protection, and structural integrity. Proper weather barriers and or cladding systems need to be installed over TechClad and should comply with architectural practices and local building code standards.

1. Brittle coatings, such as epoxy coatings, are not recommended for use with TechClad.

Warranty

10 Year Limited – Prorated – Non Transferable Warranty.
Visit www.zs2technologies.com/warranty or contact a ZS2 representative for details.

CERUS-1009
Meets
Requirements