

FUERZA THERMO-EP

2 PART HIGH PERFORMANCE, HIGH STRENGTH, TEMPERATURE RESISTANT EPOXY GROUT AND ADHESIVE

FUERZA THERMO-EP is a high-performance, multi-functional **epoxy-based structural adhesive and repair compound** specifically engineered for precision bonding, structural rehabilitation, and load-bearing anchorage applications. Formulated with advanced epoxy resin technology, it provides exceptional adhesive strength, superior mechanical performance, and outstanding resistance to shrinkage, chemicals, and environmental degradation. The material is ideally suited for the structural filling and restoration of cracks and spalled concrete, high-strength gap filling, embedment and anchorage of bolts, hooks, and mechanical fixings, as well as the permanent bonding of metallic components to concrete and other engineering substrates. Its high bond strength, dimensional stability, and durable performance make it an ideal solution for demanding structural repair, maintenance, and infrastructure rehabilitation applications.

ADVANTAGES:

- Optimized 1:1 mixing ratio for accurate proportioning and simplified on-site application.
- Develops exceptional adhesive performance under cold, damp, and high-humidity service conditions.
- Exhibits excellent thermal stability and resistance to elevated service temperatures.
- Provides outstanding mechanical properties, including high compressive, tensile, and bond strengths.
- Offers superior resistance to a wide range of chemicals, oils, fuels, dilute acids, alkalis, and aggressive industrial environments.
- Engineered with a rapid curing profile to facilitate early strength development and minimize application downtime.

APPLICATORY AREAS:

- Cementitious concrete substrates.
- Ferrous and non-ferrous metallic surfaces.
- Precast concrete elements and components.
- Clay brick masonry and masonry units.
- Ceramic tiles and vitrified ceramic surfaces.
- Natural stone substrates, including granite, limestone, and sandstone.
- Fiberglass-reinforced composite (FRP/GRP) surfaces.

TECHNICAL INFORMATION

Consistency:	Thixotropic paste
Color:	Grey
Density:	1.8 kg/liter
Compressive strength:	45 MPa
Tensile strength:	25 MPa
Tensile Bond strength:	10 MPa
Flexural strength:	15 MPa
Work life at 30°C:	45 minutes
Touch dry:	1-2 hours at 30°C
Hard dry:	4-6 hours at 30°C
Full cure at 30°C:	7 days

DIRECTIONS FOR USE

Surface Preparation:

Metal-Substrates:

Metallic surfaces shall be prepared by **abrasive grit blasting, mechanical abrasion, or solvent degreasing** to remove rust, mill scale, oil, grease, and other surface contaminants, thereby ensuring optimum substrate cleanliness and maximum adhesive bond strength. Existing painted metal surfaces should be stripped using an approved proprietary paint remover or other suitable coating removal method to expose a clean, sound substrate.

Concrete-Substrates:

Concrete surfaces shall be mechanically prepared by **abrasive grinding, scarification, or wire brushing** to eliminate laitance, loose particles, and all bond-inhibiting contaminants, including oil, grease, curing compounds, and dust. Previously coated concrete shall be mechanically abraded or flame-cleaned, where appropriate, to completely remove existing coatings and expose a structurally sound surface suitable for epoxy adhesion.

Mixing & Application:

Prior to application, **Components A and B shall be thoroughly blended** until a homogeneous, uniform mixture is achieved. Strict adherence to the specified mixing ratio and complete mechanical mixing are essential to ensure optimum curing characteristics and the development of the product's designed mechanical and adhesive properties. Improper proportioning or inadequate mixing may result in incomplete polymerization, reduced physical performance, and potential discoloration or deterioration during long-term service.

When correctly proportioned and uniformly mixed, **FUERZA THERMO-EP** cures to form a stable, non-staining adhesive system that will **not discolor or stain white or light-colored marble, ceramic tiles, or other decorative substrates**, making it suitable for aesthetically sensitive applications.

Cleaning:

All uncured material shall be removed immediately using a compatible epoxy thinner or approved cleaning solvent before the adhesive system has fully cured.

HEALTH & SAFETY:

Minimize direct skin exposure by wearing suitable protective gloves or applying an approved barrier cream prior to handling. Any contaminated skin should be thoroughly cleansed with soap and warm water immediately after exposure. Should irritation or any adverse symptoms develop or persist, obtain medical advice without delay.

PACKAGING:

FUERZA THERMO-EP is supplied in pre-proportioned 2.0 kg and 6.0 kg kit sets for accurate on-site mixing and application.

