



GreenGrey

by T.A. Group s.a.r.l



THE LEADER OF
A GREEN FUTURE

GREEN BROCHURE

T.A. GROUP – ABOUT GREENGREY

Tomorrow's habitat will comply with all dimensions of comfort. Everyone wants to enjoy a sense of well-being in their home, to feel safe, protected from the negative aspects of the outside world, comfortable and healthy.

People nowadays seek to protect environment in every single detail in life.

GreenGrey provides solutions that make buildings more efficient in terms of their resources consumption, and which help contribute to saving the planet. Its products and solutions are helping and will help even more in building a sustainable future through leading both the green building design and the sustainable building design.

GreenGrey is the green label of TA GROUP; a pioneer engineering company that have been introducing innovative building technologies in Lebanon since 1990.

GreenGrey identifies engineering solutions, plans, designs, and construction services related to green building technologies. It also recognizes selling and marketing of green building products and systems that may help reduce the impact of construction on both human and environment preserving the right of the future generations in meeting their needs within an appropriate and natural environment.

GreenGrey aims at spreading the **GREEN** practice of engineering and construction targeting towards enhancing people **THINK** and **BUILD** Green. It is an approach to make each and every single one of us involved in leading a **GREEN** future.

VISION

Building GREEN Future in the field of Engineering and Construction

MISSION

Creating "green thinking" society and using special innovative sustainable construction materials to meet the global environmental requirements

TA GROUP - SERVICES

- **Construction Projects**

TA Group is well engaged in all facets of construction from the conceptual phase till the completion of a project. Our strength is the ability to deliver projects on time and on budget without compromising quality.

Some of our construction activities include but not limited to:

- Residential buildings
- Office buildings
- Historic Renovations and Restoration projects
- Cultural and Religious projects
- Commercial and Industrial projects
- Institutional projects
- Interior construction

- **Specialties Projects**

TA Group is also active in the supply and application of specialty products and services to contractors, builders and / or owners where quality and proper application are paramount.

Our specialties activities are summarized as follows:

- Waterproofing
- Lightweight concrete
- Fiber reinforced concrete
- Concrete Repair systems
- Structural strengthening
- Renders and Special Coatings
- Surfacing Solutions
- Acoustic & vibration insulation
- Cellular Glass insulation for building Envelope
- Anti-Corrosion Zinc Coating for Galvanic Protection of Steel Structures
- Decorative concrete admixtures

TA GROUP - SERVICES

- **Sustainable Restoration and Renovation**

The renovation of a building can often be more complex than the construction of a new one. It's always a challenge to have your structure restored and renovated without losing its historical and antique value.

T.A. Group is a leading company in the building restoration and renovation sector. Dealing with historical and old structures with high aesthetical and architectural value, we guarantee professionalism and reliability through our skilled labors in addition to the ongoing quality management on the construction site.

- Historical Restoration
- Plaster And Special Mortars
- Natural Hydraulic Lime
- Old Stones Repair And Finishing
- Acoustical Restoration And Renovation
- Lightweight And Insulating Pre-Mixed Material

- **Sustainable Construction-Green Building Construction**

Tomorrow's habitat will comply with all dimensions of comfort. Everyone wants to enjoy a sense of well-being in their home, to feel safe, protected from the negative aspects of the outside world, comfortable and healthy.

T.A. Group provides solutions that make buildings more efficient in terms of their energy consumption, and which help contribute to saving the planet. Most of its solutions are already helping and will help even more in the future to improve the energy efficiency of buildings.

- Thermal Comfort
- Health Comfort
- Acoustic Comfort
- Visual Comfort
- Modular and Security Comfort

CONTRIBUTION OF TO LEED®

1. SUMMARIZED LIST OF POSSIBLE CREDITS EARNED PER EACH BRAND

TA Group is the exclusive distributor of 13 international brands that are well-known in the global **GREEN** market. Below is brief summary showing the contribution of these brand to LEED®:

✓ **KRYTON**

▪ **SUSTAINABLE SITES**

- Credit 2 - Site Development: Protect or Restore Habitat **(2 POINTS)**
- Credit 5 - Heat Island Reduction: Roof **(1 POINT)**

▪ **MATERIALS & RESOURCES**

- Credit 5 - Construction and Demolition Waste Management **(1 POINT)**

▪ **INDOOR ENVIRONMENTAL QUALITY**

- Credit 2 - Low-Emitting Materials: Paints & Coatings **(1 POINT)**

▪ **INNOVATION AND DESIGN PROCESS**

- Credit 1 - Innovation in Design **(1 POINT)**

✓ **FORTA-FERRO PERVIOUS CONCRETE**

▪ **SUSTAINABLE SITES**

- Credit 4: Rainwater Management **(1-3 POINTS)**
- Credit 5: Heat Island Reduction **(1-2 POINTS)**

▪ **WATER EFFICIENCY**

- Credit 1: Outdoor Water Use Reduction **(1-2 POINTS)**

▪ **MATERIAL AND RESOURCES**

- Credit 3: Building Product Disclosure and Optimization – Sourcing of Raw Materials **(1-2 POINTS)**

CONTRIBUTION OF TO LEED®

✓ LATERLITE

▪ SUSTAINABLE SITES

- Credit 4 - Rainwater Management **(1-3 POINTS)**
- Credit 5 - Heat Island Reduction **(1-2 POINTS)**

▪ WATER EFFICIENCY

- Credit 1 - Outdoor Water Use Reduction
 - Option 1: No irrigation required **(1-2 POINTS)**
 - Option 2: Reduced irrigation **(1-2 POINTS)**

▪ ENERGY AND ATMOSPHERE

- Prerequisite 2 - Minimum Energy Performance
- Credit 2 - Optimize Energy Performance
 - Option 1: Whole building energy simulation **(1-18 POINTS)**
 - Option 2: Prescriptive compliance (ASHRAE Advanced Energy Design Guide) **(1-6 POINTS)**

▪ MATERIALS AND RESOURCES

- Prerequisite 2 - Construction and Demolition Waste Water Management
- Credit 1 - Building Life-cycle impact Reduction
 - Option 1: Historic building reuse **(1-5 POINTS)**
 - Option 2: Renovation of abandoned or blighted building **(1-5 POINTS)**
 - Option 3: Building and material reuse **(2-4 POINTS)**
 - Option 4: Whole-building life-cycle assessment **(1-3 POINTS)**
- Credit 3 - Building Product Disclosure and Optimization – Sourcing of Raw Materials
 - Option 1: Raw material source and extraction reporting **(1 POINT)**
 - Option 2: Leadership extraction practices **(1 POINT)**
- Credit 5 - Construction and Demolition Waste Management
 - Option 1: Diversion **(1-2 POINTS)**
 - Option 2: Reduction of total waste material **(2 POINTS)**

▪ INDOOR ENVIRONMENTAL QUALITY

- Credit 5 - Thermal Comfort
 - Option 1. ASHRAE Standard 55-2010 **(1 POINT)**
 - Option 2. ISO and CEN Standards **(1 POINT)**

CONTRIBUTION OF TO LEED®

✓ FOAMGLAS®

▪ SUSTAINABLE SITES

- Credit 4 – Rainwater Management **(1-3 POINTS)**
- Credit 5 – Heat Island Reduction **(1-2 POINTS)**

▪ ENERGY AND ATMOSPHERE

- Prerequisite 2 – Minimum Energy Performance
- Credit 2 - Optimize Energy Performance **(1-18 POINTS)**

▪ MATERIALS AND RESOURCES

- Credit 2 - Building Product Disclosure and Optimization- Environmental Product Declarations (EPD) **(1-2 POINTS)**
- Credit 3 - Building Product Disclosure and Optimization - Sourcing of Raw Materials
 - Option 2: Leadership extraction practices (European Union plants) **(1 POINT)**
- Credit 4 - Building Product Disclosure and Optimization - Material Ingredients
 - Option 1: Material ingredient reporting - subject to publication of CASRN **(1 POINT)**
 - Option 2: Material ingredient optimization - subject to successful completion of Green Screen Benchmark 1.2 **(1 POINT)**
- Credit 5 – Construction and Demolition Waste Management
When the project site is within 100 miles of the manufacturing location, FOAMGLAS® insulation may also qualify as a regional material as part of MR credits 2, 3 and 4. **(1-2 POINTS)**

▪ INDOOR ENVIRONMENTAL QUALITY

- Credit 2 – low-emitting materials **(1-3 POINTS)**
PC® RTV 450 Silicone Adhesive, PC®99 Adhesive, PITTSEAL® 444N, and PITTSEAL® CW Sealant can contribute toward LEED® v4 Credit on IEQ Credit 2, Low-Emitting Materials.

CONTRIBUTION OF TO LEED®

✓ ISOLGOMMA

▪ ENERGY AND ATMOSPHERE

- Prerequisite 2 - Minimum Energy Performance
- Credit 2 - Optimize Energy Performance
 - Option 1: Whole building energy simulation **(1-18 POINTS)**
 - Option 2: Prescriptive compliance (ASHRAE Advanced Energy Design Guide) **(1-6 POINTS)**

▪ MATERIAL AND RESOURCES

- Prerequisite 2 - Construction and Demolition Waste water Management
- Credit 5 - Construction and Demolition Waste Management
 - Option 1: Diversion **(1-2 POINTS)**
 - Option 2: Reduction of total waste material **(2 POINTS)**
- Credit 3 - Building Product Disclosure and Optimization – Sourcing of Raw Materials
 - Option 1: Raw material source and extraction reporting **(1 POINT)**
 - Option 2: Leadership extraction practices **(1 POINT)**

▪ INDOOR ENVIRONMENTAL QUALITY

- Credit 9 - Acoustic Performance
 - Option 1: For each room, confirm that the total surface area of acoustic wall panels, ceiling finishes, and other sound-absorbent finishes equals or exceeds the total ceiling area of the room (excluding lights, diffusers, and grilles). Materials must have an NRC of 0.70 or higher to be included in the calculation. **(1 POINT)**
 - Option 2: Confirm through calculations described in ANSI Standard S12.60-2010 that rooms are designed to meet reverberation time requirements as specified in that standard. **(1 POINT)**

✓ SAINT-GOBAIN CALIFORNIA RANGE OF PRODUCTS

▪ SUSTAINABLE SITES

- Credit 5 - Heat Island Reduction - Roofs **(1-2 POINTS)**

▪ INDOOR ENVIRONMENTAL QUALITY

- Credit 2 - Low Emitting Materials **(1-3 POINTS)**
- Credit 5 - Thermal Comfort **(1 POINT)**

CONTRIBUTION OF TO LEED®

2. SUMMARIZED LIST OF POSSIBLE CREDITS EARNED WHEN USING T.A. GROUP-GREENGREY PRODUCTS

- **SUSTAINABLE SITES**
 - Credit 2 – Site Development: Protect and Restore Habitat **(1-2 POINTS)**
 - Credit 4 - Rainwater Management **(1-3 POINTS)**
 - Credit 5 - Heat Island Reduction **(1-2 POINTS)**

- **WATER EFFICIENCY**
 - Credit 1 - Outdoor Water Use Reduction **(1-2 POINTS)**

- **ENERGY AND ATMOSPHERE**
 - Prerequisite 2 - Minimum Energy Performance
 - Credit 2 - Optimize Energy Performance **(1-18 POINTS)**

- **MATERIALS AND RESOURCES**
 - Prerequisite 2 - Construction and Demolition Waste Water Management
 - Credit 1 - Building Life-cycle impact Reduction **(1-5 POINTS)**
 - Credit 2 – Building Product Disclosure and Optimization – Environmental product Declarations (EPD) **(1-2 POINTS)**
 - Credit 3 - Building Product Disclosure and Optimization – Material Ingredients **(1-2 POINTS)**
 - Credit 4 - Building Product Disclosure and Optimization – Sourcing of Raw Materials **(1-2 POINTS)**
 - Credit 5 - Construction and Demolition Waste Management **(1-2 POINTS)**

- **MATERIALS AND RESOURCES**
 - Prerequisite 2 - Construction and Demolition Waste Water Management
 - Credit 1 - Building Life-cycle impact Reduction **(1-5 POINTS)**
 - Credit 2 – Building Product Disclosure and Optimization – Environmental product Declarations (EPD) **(1-2 POINTS)**
 - Credit 3 - Building Product Disclosure and Optimization – Material Ingredients **(1-2 POINTS)**
 - Credit 4 - Building Product Disclosure and Optimization – Sourcing of Raw Materials **(1-2 POINTS)**
 - Credit 5 - Construction and Demolition Waste Management **(1-2 POINTS)**

- **INDOOR ENVIRONMENTAL QUALITY**
 - Credit 2 – Low-emitting Materials **(1-3 POINTS)**
 - Credit 5 - Thermal Comfort **(1 POINT)**
 - Credit 9 - Acoustic Performance **(1 POINT)**
- **INNOVATION AND DESIGN**
 - Credit 1 – Innovation in Design **(1 POINT)**

AS A PART OF AN OVERALL SUSTAINABLE CONSTRUCTION STRATEGY, TA GROUP - GREENGREY SOLUTIONS MAY HELP EARN 14 TO 46 LEED POINTS.

REFERENCES

- LEED V4 For Building Design And Construction Guide Updated To Reflect The April 5 2016 LEED V4 Building Design Addenda
- www.usgbc.org
- www.leeduser.com
- www.kryton.com
- www.forta-ferro.com
- www.laterlite.com
- www.foamglas.com
- www.isolgomma.com
- www.saint-gobain.com



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