

# Scope of Work: Thermal Insulation Installation

## Objective

To provide professional thermal insulation installation services for a total area of **164.26 sqm**, utilizing high-quality SCG Thermal Insulation to ensure energy efficiency, enhanced thermal performance, and cost savings for the client.

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## Scope of Work

### 1. Preparatory Work

1. Conduct a site inspection to assess the project area and identify potential challenges.
  2. Prepare the installation site, ensuring a clean and debris-free environment.
  3. Verify measurements and confirm the total area of **164.26 sqm** for accuracy.
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### 2. Supply of Materials

- Provide **69 pieces of SCG Thermal Insulation**, each covering **2.4 sqm**.
    - **Unit Cost:** PHP 3,328.00
    - **Total Material Cost:** PHP 229,632.00
  - Ensure the materials meet industry standards for quality and durability.
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### 3. Installation Process

1. **Material Handling:**
    - Transport insulation materials to the site.
    - Safely handle and store materials to prevent damage before installation.
  2. **Installation:**
    - Install SCG Thermal Insulation in accordance with manufacturer guidelines.
    - Ensure proper coverage and alignment for maximum thermal efficiency.
  3. **Inspection:**
    - Perform quality checks during and after installation to ensure proper fit and adherence.
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### 4. Labor and Workforce

- Skilled labor will handle the installation process efficiently.
  - Allocate workforce and supervisors to ensure timely and quality completion.
    - **Labor Cost:** PHP 91,852.80
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### 5. Contingency Allowance

- Include a **5% contingency** (PHP 11,481.60) for unforeseen expenses or adjustments.

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## 6. Taxation and Total Costs

- Apply **12% VAT** on the total direct cost:
    - VAT Amount: PHP 39,955.97
  - **Total Construction Cost (including VAT):** PHP 372,922.37
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## Deliverables

1. Fully installed SCG Thermal Insulation covering **164.26 sqm**.
  2. Quality assurance report confirming proper installation.
  3. Waste removal and cleanup post-installation.
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## Timeline

- Estimated project duration: **[Specify Duration, e.g., 3–5 days]**, depending on site conditions.
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## Inclusions

- Materials and installation of SCG Thermal Insulation.
  - Labor for installation and site cleanup.
  - Contingency fund allocation for minor adjustments.
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## Exclusions

- Additional repairs or preparation beyond standard installation.
  - Costs associated with delays caused by factors beyond contractor control (e.g., weather).
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## Acceptance Criteria

1. The thermal insulation must cover the specified **164.26 sqm** area.
2. The installation must meet industry standards for quality and performance.
3. The project must be completed within the agreed timeline and budget.

Ensuring optimal insulation quality involves using the right tools and equipment during installation. Here's a list of tools that can help achieve professional-grade results in thermal insulation projects:

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## Tools

### 1. Measurement Tools

- **Measuring Tape:** Ensures accurate dimensions of the area to be insulated.
  - **Laser Distance Meter:** Speeds up the measurement process, especially in large or hard-to-reach spaces.
  - **Chalk Line:** Marks straight lines for cutting and alignment of insulation materials.
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## 2. Cutting Tools

- **Utility Knife:** Essential for cutting batt or rigid insulation materials to fit.
  - **Insulation Saw:** Used for thicker or rigid materials like polystyrene or mineral wool boards.
  - **Straightedge or Cutting Guide:** Helps achieve precise cuts for a clean fit.
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## 3. Installation Tools

- **Staple Gun:** Secures insulation batts or rolls to wooden framing in walls and ceilings.
  - **Insulation Supports/Stay Rods:** Keeps insulation in place between joists.
  - **Hammer and Nails:** For installing supports or brackets for insulation.
  - **Drywall Screws and Drill:** Used when installing rigid boards or finishing after insulation.
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## 4. Sealing and Adhesive Tools

- **Spray Foam Gun:** Used for filling gaps, seams, and edges to prevent air leakage.
  - **Caulking Gun:** Applies caulk for sealing smaller cracks and gaps.
  - **Adhesive Applicator:** For applying insulation adhesive to secure rigid materials.
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## 5. Safety Equipment

- **Protective Gloves:** Protect hands from sharp edges and irritants in materials like fiberglass or mineral wool.
  - **Dust Mask/Respirator:** Prevents inhalation of fine insulation particles, especially when cutting.
  - **Safety Glasses:** Shields eyes from dust and debris.
  - **Coveralls:** Keeps insulation fibers from sticking to skin and clothing.
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## 6. Inspection Tools

- **Thermal Imaging Camera:** Detects heat loss or areas with insufficient insulation.
  - **Infrared Thermometer:** Measures surface temperatures to identify cold spots.
  - **Blower Door Test Equipment:** Assesses overall airtightness and identifies leaks.
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## 7. Specialized Tools for Spray Foam

- **Foam Insulation Rig:** Used for professional-grade spray foam installations.
- **Mixing Gun:** Ensures proper blending of spray foam components for even application.

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## 8. Cleanup Tools

- **Vacuum Cleaner with HEPA Filter:** Cleans up debris and fine particles safely.
- **Broom and Dustpan:** For general site cleanup.

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## Optional High-Tech Tools for Advanced Quality Assurance

- **Moisture Meter:** Ensures that insulation materials and the installation area are dry.
- **Sound Level Meter:** Measures soundproofing efficiency for acoustic insulation projects.

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## Best Practices:

1. **Always prepare the area** thoroughly by cleaning and sealing gaps before installation.
2. **Inspect installed insulation** using thermal imaging to ensure consistent coverage.
3. **Follow material-specific guidelines** for cutting, fitting, and fastening.