

PROCUREMENT PACKAGE

GYPSUM CEILING WORKS

1. Scope of Works

The Subcontractor shall design (where applicable), supply, deliver, install, finish, protect and hand over all gypsum ceiling works required for the project in accordance with the Contract Drawings, Architectural Details, Approved Shop Drawings, Specifications, QCS requirements and Consultant instructions.

The scope shall include all materials, labor, equipment, access systems, shop drawings, coordination, cutting, fitting, making good and all ancillary works necessary for a complete installation.

The works generally comprise:

- Dry Area Gypsum Ceilings.
- Moisture Resistant Gypsum Ceilings.
- High Level Ceilings.
- Low Level Ceilings.
- Bulkheads.
- Curtain Boxes.
- Ceiling Recesses.
- Shadow Gap Details.
- GRG Features (where applicable).
- Ceiling Access Panels.
- MEP Coordination Openings.
- Ceiling Support Systems.
- Joint Treatment and Repairs.
- Ceiling Reinforcement and Backing Supports.

2. Material Requirements

Gypsum Boards

- Dry Areas: 12.5mm Regular Gypsum Board.
- Wet Areas: 12.5mm Moisture Resistant Gypsum Board.

Approved Manufacturers:

- Knauf.
- Gypsemna.
- Gyproc.

Suspension System

Complete galvanized steel suspension system including:

- Main Channels.
- Furring Channels.
- Perimeter Angles.
- Hangers.
- Brackets.
- Connectors.
- Reinforcement Members.

Minimum GI thickness shall be 0.60mm.

3. Ceiling Types

The works include but are not limited to:

Dry Area Gypsum Ceilings

- Living Rooms.
- Dining Rooms.
- Bedrooms.
- Corridors.
- Lift Lobbies.
- Fire Lobbies.

- Kids Play Rooms.
- Multipurpose Rooms.
- Video Game Rooms.

Moisture Resistant Gypsum Ceilings

- Kitchens.
- Bathrooms.
- Laundry Rooms.
- Garbage Collection Rooms.
- Public Toilets.

Bulkheads

- Dining Rooms.
- Bedrooms.
- Wardrobes.
- Corridors.
- Curtain Box.

4. Shadow Gap Requirements

The subcontractor shall include all shadow gap details shown on the drawings including:

- 50mm Shadow Gaps.
- 20mm Aluminum Shadow Gaps.
- Continuous Perimeter Shadow Gaps.
- Shadow Gaps around Columns.
- Shadow Gaps around Bulkheads.

No separate measurement shall be made for shadow gap details.

5. Curtain Boxes

The subcontractor shall include all curtain box formations shown on the drawings.

The scope shall include:

- Reinforcement Supports.
- Plywood Backing.
- Recessed Curtain Pockets.
- Access Requirements.
- Formed Gypsum Profiles.

No separate measurement shall be made for curtain boxes.

6. Bulkheads and Ceiling Transitions

The subcontractor shall include all bulkheads, ceiling drops, recesses, upstands, steps and ceiling transitions required to complete the ceiling works.

For avoidance of doubt:

No Separate Measurement or Compensation

shall be made for:

- Bulkheads between high level ceilings and top of wardrobes.
- Bulkheads formed above wardrobes.
- Curtain box bulkheads.
- Bulkheads between high level ceilings and low level ceilings.
- Ceiling drops.
- Ceiling level changes.
- Transition zones.
- Concealed service bulkheads.

All such works shall be deemed included within the ceiling rates.

7. Access Panels

The subcontractor shall provide gypsum access panels wherever indicated on drawings or required for MEP maintenance access.

The access panel system shall include:

- Concealed Frame Access Panels.
- Flush Finish Access Panels.

- Moisture Resistant Access Panels in all the Areas.
- Safety Retention Chains.
- Reinforcement Framing.

Typical sizes include:

- 300 x 300 mm.
- 400 x 400 mm.
- 600 x 600 mm.

Or as required by the approved shop drawings.

The finished appearance shall match the adjacent ceiling finish.

8. MEP Coordination

The subcontractor shall fully coordinate with all MEP trades.

The rates shall include but not limited to:

- Light Fixtures Openings.
- Diffuser Openings.
- Grill Openings.
- Sprinkler Openings.
- Smoke Detector Openings.
- Speaker Openings.
- Camera Openings.
- Access Hatch Openings.
- Service Penetrations.

No additional payment shall be made for cutting, trimming, forming, modifying or making good around services.

9. Joint Treatment and Crack Repair System

The subcontractor shall provide a complete joint treatment system in accordance with the manufacturer's recommendations.

The scope shall include:

- Joint Tape.
- Joint Filler (By KNAUF or USG).
- Joint Reinforcement.
- Three Coat Joint Finishing.
- Sanding.
- Surface Preparation.

The subcontractor shall be fully responsible for preventing and rectifying:

- Joint Cracking.
- Surface Cracking.
- Settlement Cracking.
- Hairline Cracks.
- Poor Joint Visibility.

Any cracking occurring during the Defects Liability Period shall be repaired at no additional cost.

Joint repairs shall include:

- Removal of defective joint treatment.
- Reapplication of tape and fillers.
- Surface refinishing.
- Sanding.
- Making good.
- Repainting by others where required.

10. Shop Drawings

The subcontractor shall prepare and submit:

- Reflected Ceiling Plans.
- Ceiling Layout Drawings.
- Bulkhead Details.
- Curtain Box Details.

- Access Panel Details.
- Shadow Gap Details.
- MEP Coordination Drawings.
- Suspension System Layouts.

No works shall commence without approved shop drawings.

11 . Temporary Access Openings for MEP Testing, Commissioning and Balancing

The Subcontractor shall allow for the provision of temporary access openings and temporary access panels required to facilitate:

- Testing and Commissioning Activities.
- TAB (Testing, Adjusting and Balancing) Works.
- Fire Fighting Testing.
- Authority Inspections.

The Subcontractor shall coordinate with all MEP trades and shall maintain such temporary access openings as required throughout the testing and commissioning period.

Upon completion of testing, commissioning and approval of the services, the Subcontractor shall:

- Reinstall the ceiling framing where required.
- Close all temporary openings.
- Reinstall gypsum boards.
- Reapply joint treatment.
- Refinish surfaces.
- Prepare surfaces ready for painting.

No additional payment shall be made for temporary access openings, temporary access panels, reinstatement works, joint repairs, making good, re-finishing, or any associated works arising from testing and commissioning activities.

All such works shall be deemed included within the subcontract value.

11. Mock-Up

The subcontractor shall construct a representative ceiling mock-up incorporating:

- Dry Area Ceiling.
- Wet Area Ceiling.
- Shadow Gap.
- Bulkhead.
- Curtain Box.
- Access Panel.
- Typical MEP Openings.

The approved mock-up shall become the quality benchmark for the project.

12. Measurement and Payment

Contract Basis

The subcontract shall be awarded on a Lump Sum basis.

Measurement

Ceiling areas shall be measured:

Wall-to-Wall

Based on the approved shop drawings.

No deductions shall be made for:

- Light Fixtures.
- Diffusers.
- Sprinklers.
- Access Panels.
- Small Service Openings.

No separate measurement shall be made for:

- Bulkheads.
- Ceiling Drops.
- Curtain Boxes.

- Ceiling Transitions.
- Shadow Gaps.
- Recesses.
- Service Openings.
- Trimming.
- Joint Treatment.
- Joint Repairs.
- Reinforcement Members.
- Access Panel Framing.
- Ceiling Edge Details.

All such works shall be deemed included within the ceiling rates.

13. Project Program and Production Requirements

The Subcontractor acknowledges that RES27 is a fast-track and accelerated project and shall provide sufficient manpower, supervision, materials, tools and equipment to maintain the required production rates.

The Subcontractor shall consider the following maximum durations per typical floor:

Activity	Maximum Duration
Ceiling Framing Works	5 Calendar Days
Gypsum Board Closure Works	5 Calendar Days
Joint Treatment Ready for Painting	2 Calendar Days

Accordingly, the complete ceiling cycle per floor shall not exceed:

12 Calendar Days per Floor

The Subcontractor shall deploy sufficient resources to achieve and maintain the above production rates throughout the project duration.

Should the Main Contractor determine that progress is insufficient to meet the project program, the Subcontractor shall immediately increase manpower, supervisors, work fronts, equipment and working hours as instructed.

The Subcontractor shall be deemed to have fully considered the accelerated nature of the project during tendering. **No Additional Compensation**

No claims for:

- Acceleration Costs.
- Overtime Costs.
- Additional Manpower Costs.
- Additional Supervision Costs.
- Productivity Losses.
- Multiple Work Fronts.
- Weekend Working.
- Extended Working Hours.
- Shift Work.
- Program Recovery Measures.

shall be accepted at any stage of the project.

The Subcontractor shall execute the works in accordance with the Main Contractor's construction program and recovery plans whenever required without additional cos

14. Warranty

The subcontractor shall provide:

- 2-Year Defects Liability Warranty.
- 2-Year Warranty against ceiling sagging.
- 2-Year Warranty against excessive cracking.
- 2-Year Warranty against joint separation.
- 2-Year Warranty against fixing failures.
- 2-Year Warranty against workmanship defects.

Any defects occurring during the warranty period shall be rectified by the subcontractor at no additional cost to the Main Contractor.