

Scope of Work

Purpose:

The purpose of this contract is to replace existing ceramic tile flooring and wall tiles with non-slip vitrified tiles/granite stone in CGR domestic help washrooms. This modification work also includes to replace all sanitary fittings and fixtures.

Description of Work:

The intent of this contract is to provide supervision, workforce, material and equipment required to replace existing flooring wall tiling and sanitary fixtures and fittings. The work includes remove existing tile flooring/cladding and disposal of the same outside the US Consulate premises. It is the vendors responsibility to get local authority permission to remove debris from USG premises.

General Instruction

The contractor shall remove existing ceramic tile flooring, wall cladding tiles and drywall, carefully without damaging plumbing, doors etc. Contractor shall be responsible for disposing of the debris and tile material outside of US consulate premises. Contractor shall take all permissions from local authorities for disposing of trash/debris etc at dumping grounds. Contractor shall bring the materials to site only after the approval of materials by COR. The thickness of stone shall be 16mm-20mm. Cut to size stone slabs shall be brought to site as non-availability of working space for cutting. The stone slabs shall be installed with latecrete 260 or equivalent on floor and granite/vitrified tiles on marine grade ply ,1hour fire rated 12mm ply backing on walls. Contractor shall make all necessary temporary arrangements to cover the dismantled floor/wall area so that it does not obstruct the functioning of the business in that area. Contractor must submit his construction plan and schedule to COR for approval prior start of the work. Contractor shall be responsible to provide barriers, temporary partitions in order to avoid any inconvenience to the occupants in surrounding areas i.e., minimum disturbance to neighbours. The contractor must keep the areas under construction/renovations all time clean.

Materials:

The Contractor shall be responsible to provide all labours, materials, equipment and temporary partitions required for installing the stone/vitrified tiles on floor and wall

Specifications:

Contractor shall install the stone/vitrified tile flooring and cladding as per attached specifications.

Utilities:

USG shall be providing electrical and water outlet at one point. Contractor shall be responsible for further distribution. Contractor shall make his own arrangements for lighting at construction site.

Safety:

Contractor must observe the safety at site per OSHA standards. Contractor's all workers shall use proper personal protection equipment (PPEs).

Contract Period:

The Contractor must finish all work required to finish per contract within 30 days from the date of handing over the site physically to the Contractor.

Specifications for Stonework

PERFORMANCE REQUIREMENTS

Stone Abrasion Resistance: Minimum value of 12, based on testing according to ASTM C 241 or ASTM C 1353, unless a higher value is required by the referenced building stone standard.

Stone Absorption: less than .4%

SUBMITTALS:

A. Product Data for the Following:

1. Each variety of stone. Include data on physical properties required by referenced ASTM Standards.
2. Stone accessories and other manufactured products.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other Work.

C. Grout Samples for Initial Selection: For each type of grout indicated.

D. Samples for Verification:

1. For each stone type indicated, in sets of Samples not less than 300 mm square. Include three or more samples in each set and show the full range of variations in appearance Characteristics expected in completed Work.
2. For each color of grout required.

E. Maintenance Data: For stone flooring to include in maintenance manuals. Include Product Data for stone-care products used or recommended by installer and names, addresses, and telephone numbers of local sources for products.

DELIVERY, STORAGE, AND HANDLING

A. Lift stone with wide-belt slings; do not use wire rope or ropes that might cause staining. Move stone, if required, using dollies with cushioned wood supports.

B. Store stone on wood A-frame pallets with non-staining, waterproof covers. Ventilate under covers to prevent condensation.

C. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.

STONE

- A. Varieties and Sources: Subject to compliance with requirements, provide stone of varieties and from sources indicated on Drawings.
- B. Match COR's sample for variety, color, finish, and other stone characteristics relating to aesthetic effects.
- C. Provide stone that is free of cracks, seams, and starts impairing structural integrity or function.

MORTAR MATERIALS

- A. Portland Cement: ASTM C 150, Type I or II.
 - 1. Low-Alkali Cement: Not more than 0.60 percent total alkali when tested according to ASTM C 114.
- B. Hydrated Lime: ASTM C 207, Type S.

GROUTS

Mixture of Dry-Grout Mix and Latex Additive: Mixture of factory-prepared, dry-grout mix and latex additive complying with the following requirements:

- a. Unsanded Dry-Grout Mix: Dry-set grout complying with ANSI A1 18.6, for joints 3 mm and narrower.
- b. Sanded Dry-Grout Mix: Commercial Portland cement grout complying with ANSI A1 18.6, for joints 3 mm and wider.

Floor Sealer:

Colorless, slip- and stain-resistant sealer that does not affect color or physical properties of stone surfaces, as recommended by stone producers for application indicated

MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide mortar component products by one of the following or by manufacturers approved by COR.
 - a. Bostik, India.
 - b. Laticrete International, India.
 - c. Bal Endura, India.
 - d. BASF, India.

STONE FABRICATION

Cut stone to produce pieces of thickness, size, and shape indicated and to comply with

fabrication and construction tolerances recommended by applicable stone association.

1. Size: As per drawings
2. Pattern: As indicated on drawings.
3. Thickness of Stone Flooring: Provide thickness indicated, but not less than 16 mm.
4. Stone Edges: Square.
5. Cut stone to produce uniform joints, 3 mm wide, in locations indicated.
6. Clean sawed backs of stones to remove rust stains and iron particles.

Pattern Arrangement:

Fabricate and arrange stone units with veining and other natural markings to comply with the following requirements:

1. Grade and mark stone for overall uniform appearance when assembled in place. Natural variations in appearance are acceptable if installed stone units match range of colors and other appearance characteristics represented in approved samples and mockups.

INSTALLATION TOLERANCES

A. Variation in Line: For positions shown on plan for edges of flooring, steps, changes in color or finish, and continuous joint lines, do not exceed 3 mm in 2400 mm, 6 mm in 6 m, or 10 mm maximum.

B. Variation in Joint Width: Do not vary joint thickness more than 1.5 mm or $\frac{1}{8}$ of nominal joint width, whichever is less.

C. Variation in Surface Plane of Flooring: Do not exceed 3 mm in 3 m, 6 mm in 6 m, or 10 mm maximum from level or slope indicated.

D. Variation in Plane Between Adjacent Units (Lipping): Do not exceed 0.8 mm difference between planes of adjacent units

Saturate concrete with clean water several hours before placing setting bed. Remove surface water about one hour before placing setting.

B. Apply mortar bed bond coat to damp concrete and broom to provide an even coating that completely covers the concrete. Do not exceed 1.5 mm thickness. Limit area of mortar bed bond coat to avoid its drying out before placing setting bed.

1. Place reinforcing wire fabric over concrete, lapped at joints by at least one full mesh and supported so mesh becomes embedded in middle of setting bed. Hold edges back from vertical surfaces approximately 13 mm.

C. Apply mortar bed immediately after apply mortar bed bond coat. Spread, tamp, and screed to uniform thickness at elevations required for setting stone to finished elevations indicated.

D. Mix and place only that amount of mortar bed that can be covered with stone before initial set.

Cut back, bevel edge, and discard material that has reached initial set before stone can be placed.

E. Place stone before initial set of mortar occurs. Immediately before placing stone on setting bed, apply uniform 1.5 mm thick bond coat to bed or to back of each stone unit.

F. Tamp and beat stone with a wooden block or rubber mallet to obtain full contact with setting bed and to bring finished surfaces within indicated tolerances. Set each unit in a single operation before initial set of mortar; do not return to areas already set and disturb stone for purposes of realigning finished surfaces or adjusting joints.

G. Rake out joints to depth required to receive grout as units are set.

H. Point joints after setting. Fill full width mortar type and color indicated. Tool joints flat, Uniform, and smooth, without visible voids.

GROUTING OF STONE FLOORING

A. Grout stone joints to comply with ANSI A108. 10 and manufacturer's written instructions.

1. Do not use sanded grout for polished stone.

B. Grout joints as soon as possible after initial set of setting bed. Force grout into joints, taking care not to smear grout on adjoining stone and other surfaces. After initial set of grout, finish joints by tooling to produce a slightly concave polished joints, free of drying cracks.

C. Cure grout by maintaining in a damp condition for seven days except as otherwise recommended by latex-additive manufacturer

ADJUSTING AND CLEANING

A. Remove and replace stone flooring to the following description:

1. Broken, chipped, stained, or otherwise damaged stone. Stone may be repaired if methods and results are approved by COR.

B. Replace in a manner that results in stone paving's and flooring's matching approved samples, complying with other requirements and showing no evidence of replacement.

C. In-Progress Cleaning: Clean stone paving and flooring as work progresses. Remove mortar fins and smears before tooling joints.

D. Clean stone flooring after setting and grouting are complete. Use procedures recommended by stone fabricator for types of application.

E. Apply sealer to cleaned stone flooring according to sealer manufacturer's written instructions.

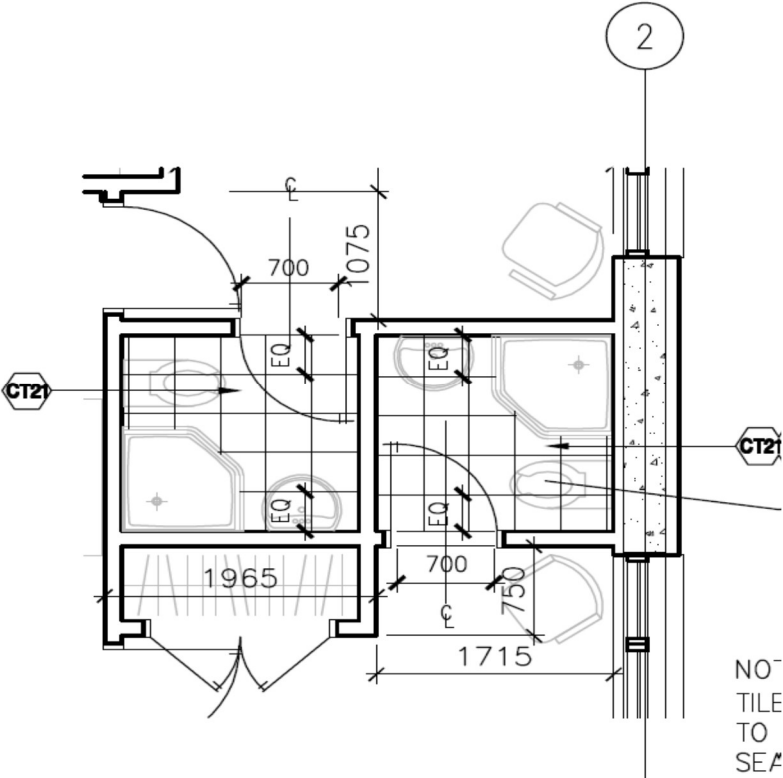
PROTECTION

A. Prohibit traffic from installed stone for a minimum of 72 hours.

B. Protect stone flooring during construction with non-staining kraft paper. Where adjoining areas

require construction work access, cover stone flooring with a minimum of 20 mm treated plywood over non-staining kraft paper.

Toilet Plans



Detail Of work :Replacement of floor, wall tiles and sanitary fixtures in CGR DOMESTIC help washrooms at Level 2 (Total 2 bathrooms)

#	Description	unit	QTY	Rate	Amount		
1	Removing floor, wall ties and drywall with disposal of the same from USG premises	sqm	25				
2	Providing and installing waterproof/fireproof 12 mm thick play (1 hour fire rating) on the steel studs and securing it with GI screws	sqm	25				
3	Providing and installing granite slab 15-20 mm thick or vitrified tiles (base rate Rs 150/sqft) with laticrete or equivalent adhesive material on waterproof ply. The granite shall be grouted with stainless and chlorine resistant grout of approved make. The granite shall be installed per adhesive manufacturer's recommendations.	sqm	25				
4	Providing and applying silicon white caulk around plumbing fittings and fixture to seal cracks/holes.	Job	1				
5	Providing and installing harvest granite or of approved shade 15-20 mm thick with latecrete 260 or equivalent adhesive on toilet floors. Any damage to USG property shall be corrected by contractor at no additional cost to USG. Cost to include removal of debris and disposing out of consulate premises at approved dumping grounds. Contractor shall be responsible to take all necessary permissions required from local authorities to dispose of trash.	Sqm	8				

	The flooring shall meet ASTM standards for slip characteristics of 25.						
6	Providing and installing Sanitary fixture and fittings to replace the existing fittings and fixtures of Kohler make or equivalent. Contractor is responsible to dispose of old fittings:						
	a) WC	ea	2				
	b) Washbasin with vanity	ea	2				
	c) Health Faucet	ea	2				
	d) Angle Valve	ea	6				
	e) Flush tank	ea	2				
	g) Replace mirror with new mirrors having 1.25" stainless steel frame of grade 304.	ea	2				
	h) Providing and installing shower cubical along with fittings like shower, hand shower and water jets matching existing unit	ea	2				
	Sub Total						
	GST (18%)						
	Grand Total						
	Grand Total IN USD						