



**STATEMENT OF WORK**  
**OF**  
**SHATTER PROOF FILM REPLACEMENT ON**  
**CHANCERY STAIR 3 GLASS PANELS**  
**AT AMERICAN EMBASSY COMPOUND,**  
**ABU DHABI, U.A.E.**

**APRIL 2020**

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**FACILITY MANAGEMENT OFFICE,  
AMERICAN EMBASSY, ABU DHABI, UAE.**

## **1.0 INTRODUCTION**

- 1.1 The U.S. Embassy, Abu Dhabi requires the services of a qualified Contractor to remove the existing shatter-resistant (Mylar) film and apply new one on Stair 3 glass panels at US Embassy, Abu Dhabi, UAE. The Contractor shall carry out the activities described as follow.
  - a) Inspect the existing glass panels at stair 3 in the Embassy Compound. Ensure all necessary measurements for the new film and its associated work requirement details are duly taken for submitting a proposal for successful installation of new shatter-resistant film.
  - b) Submit method statement and work schedule for installation of new film along with the cost proposal.
  - c) Once the Contract is awarded, procure the approved shatter-resistant film.
  - d) Remove the old film and install new film, per approved work schedule.

## **2.0 GENERAL REQUIREMENTS**

- 2.1 The U.S. Embassy, Abu Dhabi requires the services of a qualified Contractor to remove the existing shatter-resistant film and apply new one on all the Stair 3 glass panels at US Embassy, Abu Dhabi, UAE. This staircase 3 provides access from Level 1 to Level 3. There are thirty-six (36) numbers of glass panels from Level 1 to Level 2 and thirty-seven (37) glass panels from Level 2 to Level 3.
- 2.2 The Contractor shall provide cost proposal to supply new shatter-resistant film, labor, materials that include not limited to equipment, tools, glass catchers, PPEs, scaffoldings, stepladders, transportation, and supervision required to complete the installation. The Contractor shall be responsible for hiring labor, vendors and shall follow security and safety directives as explained by the Embassy.
- 2.3 The Contractor personnel are required to work under escort / supervision of Embassy personnel. The materials that are required bringing into Compound to finish the requested works may require scanning by the security personnel.
- 2.4 The Contractor shall coordinate with the Embassy personnel to assure all minor details of this project are planned and executed according to all U.S. Department of State Safety and Security regulations, applicable codes and standards.
- 2.5 The Contractor shall be admitted to the area that are designated to execute the requested work as in the contract, as indicated by the authorized Embassy Contractor Officer's Representative (COR).

- 2.6 All the work required to execute this contract must be completed as professionally, expeditiously and efficiently as possible, within a negotiated firm fixed price and performance period.
- 2.7 The Contractor shall carry out activities such that access to the stair 3 is always maintained.

### **3.0 DETAILS OF THE WORK**

- 3.1 The Contractor to inspect the existing glass panels and prepare a detailed plan for removal of film from the panels. The removal of the film and installing new films shall be executed in phases as mutually agreed between the Contractor and the Embassy COR.
- 3.2 The Contractor is responsible for supplying & setting up the ladders, scaffoldings, work bench/table, appropriate PPEs, tools etc., to remove the existing film from the glass panels without leaving scratches and breaking it.
- 3.3 The film shall be 3M brand 8mil mylar film or approved equal.
- 3.4 The Contractor shall apply mylar film to a clean window surface in accordance with the manufacturer's directions -- free of peeling, splitting, scratches, creases, wrinkles, discoloration, and foreign particles. The Contractor is responsible for making sure the existing glass panels are appropriately handled during the requested work. Due to mishandling of the glass panels if the glass panel/s found to be broken, then the Contractor is responsible for replacing the broken glass panel/s with the same specification of the existing panels.
- 3.5 The existing safety film is installed on the hazardous sides of the panel which is outer surface of the glass panels to provide protection from spontaneous glass breakage.
- 3.6 The Contractor shall ensure that the mylar film shall not show signs of waviness and distortion at the time the work is accepted. This determination shall be made by viewing the installed film from a distance of 10 feet (3 meters) from the interior room side at angles up to 45 degrees when looking at a clear or uniformly overcast sky.
- 3.7 Unacceptable mylar film applications shall be removed in accordance with manufacturer's instructions and new film applied immediately upon determination by COR/or his representatives during the inspection and acceptance process. The Contractor shall replace defective mylar within 45 days, if air bubbles are still present after the initial 30-day period has elapsed.
- 3.8 The Contractor shall provide replacement material with labor for rework, if either the defect is a material defect that is covered under the manufacture warranty or the defect is related to installation of the material at free of charge.

### **3.9 Guidelines for installing Mylar film:**

#### **3.9.1 Surface Preparation**

- 3.9.1.1 The Contractor shall clean the glass surface of paint, foreign compounds, smears, and spatters. After the initial cleaning, further cleaning of the surface may be required to receive the film in accordance with the film manufacturer's instructions.
- 3.9.1.2 The Contractor shall use Embassy approved cleaning liquid to clean mylar film surfaces and its frame supports. The recommended cleaning liquid shall be low concentration of soap and shall not contain mixture of ammonia. Also, using professional grade of squeegee and proper techniques are accepted.

#### **3.9.2 Application**

- 3.9.2.1 Greater protection for Chancery personnel from flying glass caused by blast loads is achieved by applying film such that it extends edge to edge of the sheet and into the bite of the frame. Some gaskets and compounds can dissolve the film surface, the adhesive, or the metallic coating interlayer of reflective or tinted films.
- 3.9.2.2 Provide mylar film on all stair 3 glass panels as indicated in SOW. After surface preparation, apply 3M brand or approved equal 8mil mylar film in accordance with the manufacturer's recommendations and instructions. Film shall be applied on the hazardous sides of the panel which is outer surface of the glass panel unless otherwise indicated. Multiple applications of film to achieve specified thicknesses is not allowed. The film shall not be applied if there are visible dust particles in the air, if there is frost on the glazing, or if any room condition such as temperature and humidity do not meet the manufacturer's instructions. After film application, maintain room conditions as required by the manufacturer's instructions to allow for proper curing of the adhesive.

#### **3.9.3 Application to Existing Glass without Dismantlement**

- 3.9.3.1 Mylar film shall be applied so that it extends to within 1.6 mm with a maximum of 3 mm of the edge of the visible glass area.

#### **3.9.4 Splicing**

- 3.9.4.1 Overlaps of 0.25 mm (0.010 inch) thick and thicker film are highly visible and are not recommended. If no glazing has a dimension exceeding 1475 mm (58 inches) in both directions, the film may not be spliced.
- 3.9.4.2 Joining two or more mylar films on a single plane glass is not accepted.

### **3.9.5 Cleaning after Installation**

3.9.5.1 Cleaning of the Mylar film shall be in accordance with the manufacturer's instructions.

## **4.0 OVERVIEW OF THE EXISTING GLAZED HANDRAIL**

- 4.1 This staircase provides access from Level 1 to Level 3. There are thirty-six (36) numbers of glass panels from Level 1 to Level 2 and thirty-seven (37) glass panels from level 2 to Level 3. Total height of the handrail is 1065mm.
- 4.2 The in-fill panels are made up of 12mm thick tempered glass, which has grounded smooth and polished edges. The tempered glass is secured in place by 75mmx10mm flat bar on one side and 12mmx10mm 890mm high plate on the other side placed at a typical spacing of 1295mm.
- 4.3 3mm neoprene glazing tape is provided on both sides of the supports and glass panel sits on 12mm x 6mm neoprene setting block. Tempered glass panels are attached to the steel supports by 3 numbers of 10mm – 16 button head socket cap screws.
- 4.4 In-fill glass panel sizes vary as per location, but typical glass panel is 1275mm and its 940mm high.

## **5.0 CONTRACT ADMINISTRATION**

- 5.1 The Contractor shall not perform work that is outside the SOW unless directed in writing by the CO (Contracting Office). Any work done by the Contractor outside the SOW without direction from the Contracting Office will be at the Contractor's own risk and at no cost to the Embassy.
- 5.2 The Contracting Office shall issue a Notice to Proceed (NTP) after necessary approval to begin performance under the work.
- 5.3 The COR (Contracting Officer's Representative) from Facility Management office will perform administration and technical guidance of this contract. The COR shall coordinate schedule, approve cost proposal, inspect work, monitor progress, accept completed work, review and approve invoices. The COR has the authority to direct the Contractor to stop performance of work if unsafe work conditions are observed.

## **6.0 RESPONSIBILITY OF THE CONTRACTOR**

- 6.1 The Contractor shall bear complete responsibility for management of work at site.
- 6.2 The Contractor shall assign a Supervisor / Coordinator to represent the Contractor and to manage the performance of work at site.
- 6.3 The Supervisor / Coordinator shall have adequate English language skills to be able to communicate with CO and COR.
- 6.4 The work shall be performed by the Contractor's personnel who should be trained and experienced in accomplishing the specific trades of the work, at the desired quality.
- 6.5 The Contractor shall carryout all requested activities described in the SOW and in case Contractor deutes portion of the activities to a sub-contractor; then this should be done by prior approval from the requesting office representative/s.
- 6.6 The Contractor shall bear complete responsibility and management control for the sub-contracted services and shall not deute the sub-contractor to represent the Contractor in dealings with the Embassy.
- 6.7 The Contractor shall bear complete responsibility for safe performance of work at site and comply with all local laws pertaining to construction labor and safety. In addition, the safety requirements relative to this SOW as contained in the USACE Manual EM 385-1-1 shall apply. In case of a conflict between the local laws and the requirements of EM 385-1-1, the stringent of the two shall apply. A soft copy of the USACE Manual EM 385-1-1 is available in the following link:  
[http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM\\_385-1-1\\_English\\_2003.pdf](http://www.publications.usace.army.mil/Portals/76/Publications/EngineerManuals/EM_385-1-1_English_2003.pdf)
- 6.8 The Contractor shall promptly report all mishaps / accidents at site to the Facility Management office.
- 6.9 The Contractor is responsible for making sure the existing glass panels are appropriately handled during the requested work. Due to mishandling of the glass panels if the glass panel/s got broken, then the Contractor is responsible for replacing the broken glass panel/s with the same specification of the existing panels.
- 6.10 The Contractor should follow the Safety instructions of the Embassy Safety Officer's guidelines.
- 6.11 The Contractor shall prepare and provide a specific Risk Assessment Plan associated with the requested work, along with the cost proposal.

- 6.12 The Contractor shall prepare and implement a quality management plan specific to the SOW, along with the cost proposal. The plan shall describe the standard operating procedures for completing the requested works. A copy of the quality management plan shall be provided to the COR for reference.
- 6.13 The Contractor shall provide all equipment and materials required to perform the standard services as specified in this contract. Such items include but not limited to providing adequate personnel, proper tools, equipment, Carpentry and joinery related works.
- 6.14 The Contractor shall comply with security requirements and be responsible for conduct of employees and subcontractors at work site.
- 6.15 The Contractor shall be liable for the damages caused by the Contractor's negligent performance of any of the services furnished under this contract.

## **7.0 EXECUTION OF WORK AT SITE**

- 7.1 The Facility Management office personnel and the Contractor shall review the method statement submitted with the proposal, before the contract award, and agree to the execution plan.
- 7.2 The Contractor shall stage materials and tools in a designated location. No tools and materials shall be left in work area at the end of each work-day. Keep the work areas clear of hindrances, trip hazards, and unused materials at all times. The Contractor shall be responsible for safe-keeping of materials and tools equipment at site.
- 7.3 No work shall begin at site until required manpower, equipment and materials associated to the requested works are 100% available at site. The Contractor shall cordon off the area by keeping appropriate signage before starting the requested works in order to avoid mishaps.
- 7.4 The Contractor shall not damage any property or finished work outside of this SOW. Following completion of work, the Contractor shall remove signage from site. The Contractor shall repair all damages at the Contractor's expense.
- 7.5 Temporary power and water required for the work shall be provided by the Embassy.
- 7.6 The Contractor shall remove the debris and remnants and dispose it off from the work area to CAC3 trash skip on timely basis.

## **8.0 DELIVERABLE SCHEDULE**

- 8.1 The Contractor shall commence work under this contract promptly, execute the work diligently, and achieve completion and acceptance of requested works within the contract period specified.
- 8.2 The Contractors work shall begin no more than seven (7) calendar days after notification of issuance of an order. The project shall be completed no more than 30 business days after start of activities. Work shall proceed on Embassy business days only unless otherwise approved by the Contracting Officer's Representative.
- 8.3 General work hours shall be 8:30 AM to 5:00 PM, Sunday through Thursday. Work may be scheduled outside specified general work hours, if approved by COR, if escorts are available.
- 8.4 Contractor shall submit work schedule and risk assessment plan specified in this SOW, for approval by COR. NTP will be issued after review/approval of these submittals.
- 8.5 The COR shall provide the required format for Contractor to submit security clearance submittals in two days from date of PO is issued. Contractor shall return duly completed submittals in one week to start processing access clearances. NTP will be issued after security clearances.
- 8.6 The film application shall be free of air bubbles after 30 days.
- 8.7 The Contractor to submit workmanship warranty certificate for 12 month period for the completed works.

## **9.0 SECURITY REQUIREMENTS**

- 9.1 The work to be performed under this contract requires that the Contractor, its employees and sub-contractors submit information of the Emirates ID to get access approvals from security office. The Contractor personnel will be escorted on site by the Facility Management office personnel and shall always follow instructions of the escort.
- 9.2 The Contractor shall coordinate material and equipment deliveries with the COR who in turn will coordinate it with the Embassy Security office for access approval. The Contractor shall provide vehicle and delivery personnel information in advance.

## **10.0 PAYMENTS**

- 10.1 This is fixed price lump contract. The Contractor may submit interim invoice to request for payment. The COR will review the invoice and upon fully completion of the requested

service will process the invoice for further approval to the concerned office.

- 10.2 The Contractor shall specifically identify his/her last invoice as "Final Invoice." The Final invoice shall include the remaining payment claimed to be due under the basic contract and all modifications issued, if any.

#### **11.0 ATTACHMENTS**

Attachment 1: 3M – Safety S80 Sample Card

Attachment 2: Data Sheet of 3M Safety 8mil

**END OF SOW**