

SCOPE OF SERVICES

Contractor shall provide MPEA with **Overhead Door Repair & Emergency Services**. The Contractor will furnish all labor, equipment, tools and parts necessary to perform replacement, repair and emergency service of the overhead doors.

The Contractor shall be required to perform the Services with its own employees and maintain, and/or have the capability to provide adequate personnel to fulfill the contract requirements.

LOCATIONS

The Overhead Door Repair & Emergency Services will be performed at the following locations:

| | | |
|-------------------------|----------------------------------|-------------------|
| Lakeside Center | 2301 South Lake Shore Drive | Chicago, IL 60616 |
| North Building | 450 East 23 rd Street | Chicago, IL 60616 |
| South Building | 2301 South Mines Dr. | Chicago, IL 60616 |
| Energy Center | 2211 S. Martin Luther King Dr. | Chicago, IL 60616 |
| West Building | 2302 South Prairie | Chicago, IL 60616 |
| Corporate Center | 301 East Cermak Road | Chicago, IL 60616 |
| Wintrust Arena | 200 East Cermak Road | Chicago, IL 60616 |

*The Receiving dock at the Lakeside Center has an entrance clearance of eleven feet two inches (11'2").

MPEA reserves the right to add locations as it deems necessary.

DETAILED SPECIFICATIONS

MPEA will **not** accept substitutions for the brands specified. If a specific brand/type of door is unavailable, bidder or Contractor must submit detailed product information for approval by MPEA prior to ordering.

Bidder/Contractor is responsible for field measurement and verifying dimensions for all openings.

Category A: Fire Rated Overhead Steel Doors and Accessories

- Cornell Model FS, M100 Auto-Resetting Motor Operated Fire Doors, UL-3 hour Labeled, rated at 100,000 Door Cycles, Automatic Closing Speed Not to Exceed 9" per Second, does not require use of battery back-up system. Door unit to include factory mounted cycle counter.
- 1) Performance Requirements:
Provide doors with Underwriters' Laboratories, Inc. label for a 3-hour fire rating classification label.
 - 2) MATERIALS
 - A. Curtain:
 1. Slats: No. 5F, flat faced 18-gauge, Grade 40 steel, ASTM A 653 galvanized steel zinc coating.
 2. Bottom Bar: Two 2x2x1/8-inch structural steel angles.

3. Fabricate interlocking continuous slat sections with high strength steel end locks secured with two ¼" rivets per UL requirements.
 4. Slat Finish: GalvaNex™ Coating System to include an ASTM A 653 galvanized base coating treated with dual process rinsing agents in preparation of a chemical bonding, light gray baked-on polyester base coat and a light gray baked-on polyester finish coat. Provide GalvaNex™ components limited two-year finish warranty.
 5. Bottom Bar Finish: Steel: Phosphate treatment followed by a light gray baked-on polyester powder coat; minimum 2.5 mils cured film thickness.
- B. Guides: Fabricate with minimum 3/16-inch structural steel angles. Top of inner and outer guide angles to be flared outwards to form bell mouth for smooth entry of curtain into guides. Provide removable guide stoppers to prevent over travel of curtain and bottom bar. Top 16 ½" of coil side guide angles to be removable for ease of curtain installation and as needed for future curtain service. Finish: Steel: Phosphate treatment followed a by light gray baked-on polyester powder coat; minimum 2.5 mils cured film thickness.
- C. Counterbalance Shaft Assembly:
1. Barrel: Steel pipe capable of supporting curtain load with maximum deflection of 0.03 inches per foot of width.
 2. Spring Balance: 100,000 cycle oil-tempered, heat-treated steel helical torsion spring assembly designed for proper balance of door to ensure that maximum effort to operate will not exceed 25 lbs. Provide wheel for applying and adjusting spring torque.
- D. Brackets: Fabricate from minimum 1/4-inch steel plate with permanently lubricated ball or roller bearings at rotating support points to support counterbalance shaft assembly and form end closures. Finish: Steel Phosphate treatment followed by a light gray baked-on polyester powder coat; minimum 2.5 mils cured film thickness.
- E. Hood: 24-gauge galvanized steel with reinforced top and bottom edges. Provide minimum 1/4-inch steel intermediate support brackets as required to prevent excessive sag. Finish: GalvaNex™ Coating System to include an ASTM A 653 galvanized base coating treated with dual process rinsing agents in preparation of a chemical bonding, light gray baked-on polyester base coat and a light gray baked-on polyester finish coat. Provide GalvaNex™ components limited two-year finish warranty.
- F. Smoke Seals:
1. Bottom Bar, Motor Operated Doors: Combination smoke seal/sensing edge.
 2. Guides and Head: Replaceable, UL listed, nylon pile smoke seals sealing against fascia side of curtain.

3) ACCESSORIES

- A. Ionization Smoke Detector: UL listed.

4) OPERATION

- A. M100 Series Motor Operated: Cornell Model FS, UL listed, and FM approved, NEMA 1 enclosure rating, horsepower as recommended by manufacturer, [115v single] [230v single] [208/230v three] [460v three] phase service. Provide open drip-proof motor, removable without affecting setting of limit switches; UL listed thermal overload protection; solenoid brake; planetary reduction gearing and rotary limit switches; transformer with 24 v control secondary; and all integral electrical components prewired to terminal blocks.

Automatic closure shall be activated by fusible link or a local smoke/fire detector. Doors shall not require a releasing device when activated by an alarm signal.

Doors shall maintain an average closing speed of not more than 9" per second during automatic closing. When automatic closure is activated, electric sensing edge and push button are inoperable.

Doors shall be fail-safe and close upon power failure.

Resetting of spring tension or mechanical dropouts shall not be required and is not acceptable. Upon restoration of power, replacement of fusible link or clearing of the alarm signal, doors shall immediately reset by opening with the push button.

The electrical contractor shall mount the control station(s) and supply the appropriate disconnect switch, all conduit and wiring per the overhead door wiring instructions.

- 1. Control Station: Surface mounted, "Open/Close" key switch with "Stop" push button; NEMA 1. **MPEA to provide key switches.**

- B. Smoke Seal/Sensing Edge: Provide automatic stop control by an automatic sensing switch within neoprene astragal extending full width of door bottom bar.

- 1. Provide an electric sensing edge device. Contact before door fully closes shall cause door to immediately stop downward travel. Provide take up cord and reel connection to control circuit.

- C. Automatic Closing and Speed Governor Mechanism:

- 1. M100 FireGard™ Motor Operated System:
 - a. Activation: Local smoke and heat detectors or power outage or melting of fusible link.
 - b. Operation: Motor operator shall close door upon signal from local smoke and heat detectors, power outage or melting of fusible link.
 - c. Closing Speed: Not more than 9 inches per second.
 - d. Reset Procedure: Operation of control station after alarm is cleared or power is restored or replace fusible link; resetting of spring tension or mechanical dropouts shall not be required and is not acceptable.

INSTALLATION

- A. Comply with NFPA 80 and follow manufacturer's installation instructions.

FIELD QUALITY CONTROL

- A. Site Test: Test doors for normal operation and automatic closing. Coordinate with authorities having jurisdiction to witness test and sign Drop Test Form.

DEMONSTRATION

- A. Demonstrate proper operation, testing and reset procedures for MPEA representative
- B. Instruct MPEA Representative in maintenance procedures.

8' x 8' Overhead Steel Doors

Material: Galvanized Steel 18 Gauge Slats

Size: 8' x 8' (must be verified in field)

10' x 10' Overhead Steel Doors

Material: Galvanized Steel 18 Gauge Slats

Size: 10' x 10' (must be verified in field)

12' x 12' Overhead Steel Doors

Material: Galvanized Steel 18 Gauge Slats

Size: 10' x 10' (must be verified in field)

16' x 10' Overhead Steel Doors

Material: Galvanized Steel 18 Gauge Slats

Size: 12' x 12' (must be verified in field)

24' x 16' Overhead Steel Doors

Material: Galvanized Steel 18 Gauge Slats

Size: 12' x 12' (must be verified in field)

Category A – Accessories

- Motor Controls: a) 1/2 HP, Single Phase, 110V
b) 1 HP, Three-Phase, 480V
Bottom Bars.
Reversing Edge.
Smoke Detectors, Ionization type.
Key Test Switches.

Category B: Non-Rated Overhead Steel Doors and Accessories

Non-Rated Coiling Service Door Specification

SYSTEM DESCRIPTION

A. Design Requirements:

- 1. Wind Loading: Supply doors to withstand up to 20 psf maximum wind load.
- 2. Cycle Life: Design doors of special construction for high cycle use. Expected cycles greater than 20 cycles per day.

MATERIALS

A. Curtain:

1. Slats: No. 5F, 18-gauge, Grade 40 steel, ASTM A 653 galvanized steel zinc coating.
2. Bottom Bar: Two 2x2x1/8-inch structural steel angles.
3. Fabricate interlocking sections with high strength endlocks on alternate slats each secured with two ¼" rivets. Provide windlocks as required to meet specified wind load.
4. Slat Finish:
 - a. GalvaNex™ Coating System to include an ASTM A 653 galvanized base coating treated with dual process rinsing agents in preparation of a chemical bonding, light gray baked-on polyester base coat and a light gray baked-on polyester finish coat. Provide GalvaNex™ components limited two-year finish warranty.
5. Bottom Bar Finish:
 - a. Steel: Phosphate treatment followed by a light gray baked-on polyester powder coat; minimum 2.5 mils cured film thickness.

C. Guides: Fabricate with structural steel angles. Provide windlock bars of same material when windlocks are required to meet specified wind load. Top of inner and outer guide angles to be flared outwards to form bellmouth for smooth entry of curtain into guides. Provide removable guide stoppers to prevent over travel of curtain and bottom bar. Top 16 ½" of coil side guide angles to be removable for ease of curtain installation and as needed for future curtain service.

1. Finish:
 - a. Steel: Phosphate treatment followed by a light gray baked-on polyester powder coat; minimum 2.5 mils cured film thickness.

C. Counterbalance Shaft Assembly:

1. Barrel: Steel pipe capable of supporting curtain load with maximum deflection of 0.03 inches per foot of width.
2. Spring Balance: 100,000 cycle oil-tempered, heat-treated steel helical torsion spring assembly designed for proper balance of door to ensure that maximum effort to operate will not exceed 25 lbs. Provide wheel for applying and adjusting spring torque.

D. Brackets: Fabricate from minimum 3/16-inch steel plate with permanently lubricated ball or roller bearings at rotating support points to support counterbalance shaft assembly and form end closures.

1. Finish:
 - a. Steel: Phosphate treatment followed by a light gray baked-on polyester powder coat; minimum 2.5 mils cured film thickness.

E. Hood: 24-gauge galvanized steel with reinforced top and bottom edges. Provide minimum 1/4-inch steel intermediate support brackets as required to prevent excessive sag.

1. Finish:
 - a. GalvaNex™ Coating System to include an ASTM A 653 galvanized base coating treated with dual process rinsing agents in preparation of a chemical bonding, light gray baked-on polyester base

coat and a light gray baked-on polyester finish coat. Provide GalvaNex™ components limited two-year finish warranty.

F. Weatherstripping:

1. Bottom Bar, Motor Operated Doors: Weather/sensing edge within neoprene or rubber astragal extending full width of door bottom bar.
2. Guides: Vinyl strip sealing against fascia side of curtain.
3. Lintel Seal: Nylon brush seal fitted at door header to impede air flow.

OPERATION

- A. Supply Cornell Model SG, continuous duty, UL listed, Totally Enclosed Fan Cooled gear head operator(s) rated (1/2) to (7 1/2) hp as recommended by door manufacture for size and type of door, voltage and phase listed in pricing section. Provide complete with electric motor and factory pre-wired motor control terminals, maintenance free solenoid actuated brake, emergency manual chain hoist provided up to 2 hp and control stations. Motor shall be high starting torque, industrial type, with overload protection. Primary speed reduction shall be heavy-duty gears running in grease or oil bath with mechanical braking to hold the door in any position. When equipped, the emergency manual chain hoist assembly is automatically disengaged when motor is energized. A disconnect chain shall not be required to engage or release the manual chain hoist. Operator drive and door driven sprockets shall be provided with minimum #50 roller chain. Operator shall be capable of driving the door at a speed of 6 to 9 inches per second. Fully adjustable, driven linear screw type cam limit switch mechanism shall synchronize the operator with the door. The motor shall be removable without affecting the limit switch settings. The electrical contractor shall mount the control station(s) and supply the appropriate disconnect switch, all conduit and wiring per the overhead door wiring instructions.
1. Control Station: Surface mounted, "Open/Close" key switch with "Stop" push button; NEMA 3R. **MPEA to provide key switches.**
- B. Weather/Sensing Edge: Provide automatic reversing control by an automatic sensing switch within neoprene or rubber astragal extending full width of door bottom bar.
1. Provide an electric sensing edge device. Contact before door fully closes shall cause door to immediately stop downward travel and reverse direction to the fully opened position. Provide retracting safety cord and reel connection to control circuit.

DEMONSTRATION

- A. Demonstrate proper operation to Owner's Representative.
- B. Instruct Owner's Representative in maintenance procedures.

8' x 8' Overhead Steel Doors

Material: Galvanized Steel 18 Gauge Slats

Size: 8' x 8' (must be verified in field)

10' x 10' Overhead Steel Doors

Material: Galvanized Steel 18 Gauge Slats

Size: 10' x 10' (must be verified in field)

12' x 12' Overhead Steel Doors

Material: Galvanized Steel 18 Gauge Slats

Size: 10' x 10' (must be verified in field)

16' x 10' Overhead Steel Doors

Material:" Galvanized Steel 18 Gauge Slats

Size: 12' x 12' (must be verified in field)

24' x 16' Overhead Steel Doors

Material:" Galvanized Steel 18 Gauge Slats

Size: 12' x 12' (must be verified in field)

Category B – Accessories

Motor Controls: a)1/2 HP, Single Phase, 110V
b) 1 HP, Three-Phase, 480V

Bottom Bars.

Reversing Edge.

CATEGORY C: WINTRUST ARENA OVERHEAD DOORS

The MPEA opened the new Wintrust Arena in fall of 2017 which contains 3 types of overhead doors.

1. **Brand: C.H.I.**
Model 3216
Door Width 28'-2"
Door Height 16"-0"

Panel Material 26-gauge hot dipped G60 galvanized / 27-gauge interior hot dipped G40 galvanized steel.

Exterior power coated Interior White polyester primer and topcoat.

Section Thickness 2"

Panel Profile Wood grain textured with four micro-grooves wood grain flush interior.

Joint Design Tongue and Groove rails with full thermal break.

End Caps 20-gauge white painted galvanized steel full height of section.

Insulation CFC free urethane foamed in place to exterior and interior panels R-Value of 17.54 U-Value of 0.057.

Tracks 3" tracks are 12-gauge galvanized steel.

Track Mounting Full jamb angle Lower tracks are adjustable to ensure weather tight fit.

Hardware Galvanized steel hinges 11-gauge Top and Bottom fixtures are 12-gauge galvanized steel. Rollers have 10 ball bearings with case hardened steel tire.

Counterbalance Oil tempered torsion springs are mounted on a solid steel cross-header shaft supported by galvanized steel ball bearing end plates and center brackets

Springs are custom designed for exact door Weight, Size, and track trajectory in accordance with current ANSI standards. Counterbalance is transferred through galvanized aircraft quality cables secured to bottom of door. Spring Cyclage 10,000 cycles.

Trussing Galvanized trussing provided according to door size and design.

2. Brand: Cornell Fire door Rolling Door UL Labeled

Model: ERD20

Door Width 24'-0"

Door Height 14'-6"

Slats are 22 gauge galvanized steel phosphatized polyester powder coating.

Bottom Bar Structural steel polyester power coating

Guides Structural steel polyester power coating.

Hood Galvanized steel phosphatized polyester power coating.

Springs are to be 100,000 Cycles.

Motor 1-1/2 HP 480v 3 ph. 60Hz. M100 Drop Test.

3. Brand: Cornell Rolling Counter Door

Model ESC10

Door Width 13'-7"

Door Height 6'-2"

Slats are to be 22 gauge interlocking with Nylon end locks.

Curtain is Galvanized steel phosphatized polyester power coated.

Bottom Bar plain steel polyester power coating color Ral 7035.

Bottom Bar Locking center mounted cylinder locking device.

Guides Aluminum polyester power coating color Ral 7035.

Hood Galvanized steel polyester phosphatized polyester power coating color Ral 7035

Removable Hand Crank.

CATEGORY D: FABRIC OVERHEAD DOORS SELF REPAIRING AND ACCESSORIES

• **Dynaco High Speed, Power M-2:**

Dynaco High Speed Fabric Overhead Doors/Self Repairing

Size: 10' x 10' (must be verified in field)

Power: 460 volts, 3 ph., 60 amps.

Dynaco High Speed Fabric Overhead Doors/Self Repairing

Size: 8' x 8' (must be verified in field)

Power: 460 volts, 3 ph., 60 amps.

Category D - Accessories:

- Vision Panels, two (2) per unit
- Motor cover
- Drum Hood
- Orange Flashing Warning Light
- Pull Switch, two (2) per unit
- Radar Support Bracket
- Falcon Radar

INSTALLATION

- All pricing for Categories A, B, and C on the Bid Form must include installation, all necessary motors and motor controls, key test stations, smoke detectors and any other electrical components required for the doors to function properly and meet all test.
- Except for new openings, Contractor must reuse existing key switches and open/close/stop buttons.
- All necessary electrical components to meet the required voltage.
- MPEA staff is only responsible for bringing power to the door. All other electrical requirements for proper door operation and Code are to be provided and installed by Contractor.
- All doors must be drop tested at completion of installation and meet NFPA 80.
- All drop tests must be performed in front of a MPEA representative.
- Contractor must provide manufacturer's O&M manuals for each door.
- Contractor is responsible for removing, hauling, and disposing existing doors additional at no cost to the Authority.

NOTIFICATION AND SERVICE SCHEDULE

The Contractor shall be notified by phone/email when MPEA needs repair services. All Services will be subject to McCormick Place/Wintrust Arena schedule of events. The regular business hours of MPEA are Sunday through Saturday from 7:00 AM to 3:30 PM. All services will be performed during regular business hours and days unless so designated by MPEA. Emergency work responses will be required within two (2) hours of notification.

PRICING

The Total Contract Price is all-inclusive, i.e., includes shipping, installation, hauling, disposing, and handling. No additional charges, of any kind, shall be honored by MPEA.

PREVAILING WAGE/FEES

The Contractor shall be paid for the Services performed as follows:

- **Hourly Labor Rates.** The Contractor's hourly labor rate shall include the prevailing wage rate, fringe benefits (health and welfare, pension, and/or others) as well as all employer expenses for FICA, workman's compensation, liability insurance, unemployment insurance and any other municipality, state, or federal requirements regarding employees. The hourly labor rate shall also include all costs and expenses for trucks and/or vehicles, tools, equipment associated with the trade, travel, pick-up, and delivery of materials, estimating, call-back supervision, administrative overhead, and profit.

- **Materials.** The Contractor shall be paid for materials used for overhead door repair. Prices for all applicable overhead door parts must be submitted with the Bid.

MANUFACTURER

In cases where an item is identified by a manufacturer's name, trade name, catalog number, or reference, it is understood that the Bidder proposes to furnish the item so identified and does **not** propose to furnish an "equal".

The Contractor shall use the materials approved by the door's manufacturer and parts that will not void the fire rating of the door where applicable. The Contractor shall provide a list of the sources available for the Contractor to obtain materials used to meet the contract requirements.

The Contractor shall be familiar with the various types of overhead door materials and maintain an adequate inventory of accessories, parts, and supplies. MPEA will incur no charge until the material is used.

AUTHORIZED DISTRIBUTOR

The Contractor must either be the manufacturer, supplier or an authorized distributor of the proposed equipment, materials and supplies and be capable of furnishing original product warranty and manufacturer's related equipment, materials, and supplies, as well as attendant items, such as product information, product re-call notices, etc.

REPRESENTATION AND WARRANTY

The Contractor represents that all materials are of good quality and workmanship, and free from faults, deficiencies, and defects in material, both latent and patent. MPEA may return any nonconforming or defective materials to the Contractor or require replacement of the materials at the time the defect is discovered, all at the Contractor's expense. The Contractor must replace any nonconforming or defective materials within 10 (ten) days of notification from MPEA representative. Acceptance of materials and supplies by MPEA by payment shall not relieve the Contractor of the responsibilities herein.

The Contractor must warrant that materials and services supplied must conform to specifications, samples, or drawings submitted. The warranty period shall be for at least one (1) year from the date of delivery or date of final acceptance, whichever is later. Acceptance of materials and supplies by MPEA by payment shall not relieve the Contractor of the responsibilities hereunder.

Warranty on new doors shall begin upon completion of a drop test once the new door has been installed. Drop tests on newly installed doors must be performed in front of a MPEA representative.

Warranty on all repaired doors shall begin upon completion, sign-off and acceptance of the repair by a MPEA representative.

DISCONTINUED EQUIPMENT AND SUPPLIES

Contractor must notify MPEA immediately of any discontinued equipment, materials and/or supplies. An alternate product may be accepted if the alternate is comparable to the item ordered. Approval of such alternate must be obtained from MPEA prior to delivery.

INSPECTION

At all times, MPEA and its representatives shall have access to the Work wherever it is in preparation or progress and the Contractor shall provide for such access and inspection.

The Contractor shall perform all Services in a satisfactory manner, as reasonably determined by the MPEA representative.

EMERGENCIES

The Contractor shall be capable of responding to emergency service calls within the **“designated emergency time frame given at the time of notification”** by MPEA representative. Emergency service requests may occur on a 24-hour basis, seven (7) days per week.

A written list of 24-hour emergency phone numbers for the Contractor’s authorized personnel shall be made available to the Authority.

DAMAGES

The Contractor shall protect from damage all parts of the present building liable to injury by its operation and shall, at its own expense, make good all such damage to the entire satisfaction of MPEA.

PROTECTIVE COVERING

The Contractor shall, always, maintain temporary protective covering on all surfaces, etc., from which materials have been removed, protecting the buildings and the contents from all damages.

WASTE REMOVAL

The Contractor shall, always, keep the premises free from accumulations of waste materials or rubbish caused by its employees or work and shall remove all its rubbish at the completion of its work to the total satisfaction of MPEA. Use of MPEA’s open boxes or compactors is not allowed. All debris must be hauled off site.

TOOLS AND EQUIPMENT

The Contractor shall not use any Authority property such as tools, equipment, ladders, lifts, extension cords, etc., in performing the Services. MPEA shall provide electricity. MPEA will not be responsible for providing storage or be liable for Contractor’s tools, equipment, etc.

PARKING

MPEA is not responsible for parking of the Contractor’s vehicles.

MPEA shall have the right, at any time, to request removal of any employee of the Contractor from the job site. The Contractor shall use all reasonable requests to replace such an employee.

LICENSE AND PERMITS

The Contractor shall maintain and have current all municipal, county, state, and/or federal license(s) that are applicable and required for their trade. It is solely the responsibility of the Contractor to acquire the necessary licenses, permits, etc. to perform all services associated with this Contract. The Contractor will bear all liability arising from its failure to secure the required license, permits, etc.

INVOICING

Contractor must address all invoices referencing the Contract Number and Purchase Order (“O1” and “O2”) to the following:

MPEA - Accounts Payable Department
301 East Cermak Road
Chicago, Illinois 60616
ATTN: Alichia Johnson

All electronic invoices must be submitted via e-mail to: Alichia Johnson, ajohnson@mccormickplace.com and accounts-payable@mpea.com.