

# Midtown Tower — Project Manual

412 W 36th Street, New York, NY 10018

OWNER

**Greystone Holdings**

ARCHITECT

**SHoP Architects**

ISSUE DATE

**September 15, 2025 (100% CD)**

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## PROJECT MANUAL — MIDTOWN TOWER

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Owner: Greystone Holdings

Architect: SHoP Architects

Date: 2025-09-15 (100% CD set)

## DIVISION

**DIVISION 01 — GENERAL REQUIREMENTS****01 11 00 — SUMMARY OF WORK**

The Project consists of construction of a new 22-story mixed-use tower with two below-grade levels (B1, B2), retail at grade and second floor, residential above. Total gross area approximately 184,000 SF. Curtain wall facade. Steel superstructure on concrete foundation mat. Two passenger elevators, one service elevator. LEED Silver target.

**01 33 00 — SUBMITTAL PROCEDURES**

Contractor shall submit shop drawings, product data, and samples per the Submittal Schedule. Allow 14 calendar days for review of each submittal. Resubmittals require 7 calendar days. Submittals shall be electronic via Procore.

## DIVISION

**DIVISION 03 — CONCRETE****03 30 00 — CAST-IN-PLACE CONCRETE**

- A. Foundation concrete: 5,000 psi at 28 days. Type II portland cement. Maximum water-cement ratio 0.45. Slump 4 inches  $\pm$  1 inch. Air entrainment not required (interior foundation). Aggregate ASTM C33 with 3/4 inch nominal maximum size.
- B. Slab-on-grade: 4,000 psi at 28 days. 4 inch slump max. Welded wire fabric 6x6 W2.9xW2.9, supported on chairs at mid-depth.
- C. Suspended slabs (levels 1 through Roof): 5,000 psi at 28 days, lightweight concrete (110 pcf), normalweight aggregate. 4 inch slump.

- D. Columns and shear walls (B2 through Level 10): 8,000 psi at 56 days.
- E. Columns and shear walls (Level 11 through Roof): 6,000 psi at 56 days.
- F. Curing: 7 days continuous moist curing. Curing compound per ASTM C309 acceptable for slabs not receiving floor finishes.

### 03 31 00 — STRUCTURAL CONCRETE

Reinforcing steel ASTM A615 Grade 60. Welded splices per AWS D1.4.  
Mechanical couplers Lenton Position or approved equal.

#### DIVISION

### DIVISION 05 — METALS

#### 05 12 00 — STRUCTURAL STEEL

- A. Wide-flange shapes: ASTM A992,  $F_y = 50$  ksi.
- B. HSS shapes: ASTM A500 Grade C.
- C. Plates and bars: ASTM A36 unless noted.
- D. High-strength bolts: ASTM F3125 Grade A325 or A490 as noted. All bolted connections at moment frames shall be slip-critical Class A.
- E. Welding: AWS D1.1. All field welds shall be performed by AWS-certified welders. UT inspection required for full-penetration welds at moment connections; visual inspection at fillet welds.
- F. Beam penetrations: not permitted in moment frames. Penetrations in gravity beams permitted with prior written approval of SEOR. Reinforce per detail 7/S5.21.

#### DIVISION

### DIVISION 07 — THERMAL AND MOISTURE PROTECTION

#### 07 21 00 — THERMAL INSULATION

Mineral wool batt insulation, R-13 in stud cavities of rated assemblies.  
R-21 in exterior wall cavities. R-30 at roof. Continuous polyiso board at exterior face of stud walls, 2 inch thick, R-12.

#### 07 27 00 — AIR BARRIERS

Self-adhered air/water-resistive barrier at all exterior wall sheathing, returned into all openings. Henry Blueskin VP100 or approved equal.

### 07 92 00 — JOINT SEALANTS

Fire-rated sealants at all penetrations through rated assemblies. UL-listed firestop systems per code. Submit firestop schedule. Acoustical sealant at perimeter of all rated walls — continuous bead.

### 07 95 00 — EXPANSION CONTROL

Seismic joints called out at Grid Line 9 (between Tower A and Tower B podium), at Grid Line K (between tower and adjacent retail block), and at the connection between the cellar levels and the tower. Joint covers to accommodate 4-inch movement. See detail series 1-6 on A8.71.

## DIVISION

## DIVISION 09 — FINISHES

### 09 21 16 — GYPSUM BOARD ASSEMBLIES

- A. Wall Type W-1 (non-rated interior partition): 5/8" Type X gypsum board each side of 3-5/8" metal studs at 16" o.c. Sound batt insulation.
- B. Wall Type W-2 (1-hour rated): UL U411. 5/8" Type X gypsum board each side of 3-5/8" 25-gauge metal studs at 24" o.c.
- C. Wall Type W-3 (2-hour rated, corridor walls including corridor 1A): UL U419. 5/8" Type X gypsum board each face of 3-5/8" 25-gauge metal studs at 24" o.c. Mineral wool insulation R-13 in cavity. Joints taped and finished to Level 4. Sealant at perimeter per Section 07 92 00.
- D. Wall Type W-4 (shaft wall): UL U467. 1" shaftliner panel + 2-1/2" CH studs + 5/8" Type X gypsum each face. 2-hour rating.
- E. Wall Type W-5 (demising wall, dwelling units): STC 60 minimum. Double 3-5/8" studs with 1" air gap, 5/8" Type X each face, sound batt.

### 09 30 00 — TILING

Porcelain tile at all wet areas. Schluter membrane at shower pans.

### 09 65 00 — RESILIENT FLOORING

Sheet vinyl with heat-welded seams in back-of-house areas. ESD flooring in IT rooms.

**DIVISION****DIVISION 23 — HVAC****23 00 00 — HVAC SCOPE OVERVIEW**

The HVAC system consists of:

- Two roof-mounted air-cooled chillers (250 tons each) feeding chilled water risers in the central mechanical shaft.
- One natural-gas condensing boiler plant (3.0 MMBTU/h total) in B1 mechanical room.
- VAV system with hot water reheat at perimeter zones.
- DOAS unit for ventilation, ERV at the rooftop.

Floor-by-floor scope:

- B2: Mechanical/electrical/fire-pump rooms only. No occupied HVAC.
- B1: Parking ventilation, CO-monitored exhaust. Boiler plant.
- Ground floor (retail): Tenant-supplied split systems with central exhaust.
- Levels 2–3 (retail/amenities): Constant-volume rooftop units served via ductwork down. Total ductwork on Level 2: approximately 4,200 LF.
- Levels 4–10 (residential): Four-pipe fan coil units in each dwelling unit. Common corridor served by DOAS branch.
- Level 11–22 (residential): Same configuration as 4–10 with smaller fan coil units.
- Level 14: Standard residential mechanical scope. Riser pump room at Level 14 mechanical closet (Grid F/2) for booster pumping to upper floors. Supply duct routing in corridor includes a 24x14 main running east-west along grid line 14. Conflict noted with W18x40 beam at G/14 — under review (see RFI-042).

**23 21 00 — HYDRONIC PIPING**

Schedule 40 black steel for chilled water risers. Type L copper for domestic water. Insulation per spec section 23 07 19.

## DIVISION

**DIVISION 26 — ELECTRICAL****26 00 00 — ELECTRICAL SCOPE**

- Main service: 4,000A, 480/277V from utility.
- Generator: 750 kW diesel emergency generator at roof level.
- Distribution: Bus duct risers in central electrical shaft.
- Lighting: LED throughout. DALI controls in common areas.

## EXHIBIT

**EXHIBIT A — KEY DRAWING REFERENCES (excerpts)**

A2.03 — Wall Types Plan, Level 3. Corridor 1A is tagged W-3 (2-hour rated).

A2.04 — Wall Types Plan, Level 14.

A8.11 — Wall Type Schedule. See Section 09 21 16 for full assembly.

A8.21 — Curtain Wall Details. Detail 7 references "standard parapet anchor" — anchor spacing not given (see RFI-041, answered).

A8.71 — Expansion & Seismic Joint Details. Joints called out at Grids 9, K, and cellar-to-tower interface.

S0.01 — Structural General Notes. Concrete strengths, rebar grade, welding.

S5.21 — Beam Penetration Reinforcement Details.

M2.14 — Level 14 Mechanical Plan. Shows 24x14 supply duct east-west along grid line 14 — conflicts with W18x40 beam (see RFI-042).