

# MEP Specifications & Security Equipment

## TindallCast Cell Modules

The Tindall standard module includes two cells and a fully upfitted common utility chase. The following specification identifies what is provided by Tindall and the connection requirements to be made in the field by site MEP contractors. For additional details, see MEP drawings M-1, E-1 and P-1 in Chapter 8 of the Tindall Specification Guide.

### Mechanical - HVAC

**Cell volume** 700 CF (85sf Cell)

**Back wall insulation** R=13

#### Ventilation system:

- Security grilles - 6" x 10", 43% open
- HVAC ducts - supply: 10" diameter, return: 6" diameter
- Supply ducts are insulated
- Flow dampered supply
- Individual cell smoke detection (smoke detectors not by Tindall)

<b>Ventilation Rates Each Cell</b> <i>(Typical values for 85sf Cell)</i>	<b>CFM</b>	<b>Air Changes</b> <b>Per hour</b>	<b>Grille Pressure</b> <b>H<sub>2</sub>O" drop</b>
Minimal heating requirements	100	8	.03
Typical Heat and A/C	175	15	.07
Ventilation Only	250	20	.15

#### Connection materials (per project specifications, supplied and installed by others)

Supply air: Connect with 10" flex duct with bands

- approximately 3<sup>ft</sup> from level one to mezzanine level
- approximately 1<sup>ft</sup> from mezzanine level to plenum above

Return air: Connect with 6" flex duct with bands

- approximately 3<sup>ft</sup> from level one to mezzanine level
- approximately 1<sup>ft</sup> from mezzanine level to plenum above

**Important note:** All flow damper adjustments and balancing not by Tindall.

# MEP Specifications & Security Equipment (cont)

## Plumbing - Pressure Water

### Water supply system

- Cold 1½" copper
- Hot ¾" copper (insulated)
- Pressure 30-80 PSI, (max 100, min 25 during flush)
- Valve operation pneumatic

### Fixtures

- Water Closet/Lavatory Acorn M1415-E510 or equivalent (Stainless steel combination unit)
- Flush valve Sloan Royal Prison Flush 9603 (1.6 gal) pneumatic
- Bubblers valve 04-MA2 Acorn Manifold Air Control Valve Assembly
- Overflow protection Yes

**Important note:** Sink bubbler adjustment for flow and duration not by Tindall.

### Connection materials (per project specifications, supplied and installed by others)

- Cold water: Connect with 1½" copper tubing
- approximately 5<sup>ft</sup> from level one to mezzanine level
  - approximately 3<sup>ft</sup> from mezzanine level to plenum above

- Hot water: Connect with ¾" copper tubing
- approximately 5<sup>ft</sup> from level one to mezzanine level
  - approximately 3<sup>ft</sup> from mezzanine level to plenum above

### Hook up to building main supply (per project specification, by others)

- Dirt & Debris: Completely flush hot and cold risers to eliminate all debris in the lines before using any valve. Valves are very sensitive to debris.
- Adjust bubblers: Bubblers must be adjusted to building water pressure.
- Water pressure: Water pressure must not exceed 100 PSIG static to avoid valve damage. Water pressure must maintain over 25 PSIG during flush for proper operation.
- Chlorine: System must be purged of all chlorine after disinfecting. Chlorine is detrimental to fixture valves that are not used regularly.

## Waste Water

### Waste system

- Waste line: 4" no-hub cast iron with pinned clean out
- Vent line: 2" no-hub cast iron

### Connection materials (per project specifications, supplied and installed by others)

- Waste line: 4" no-hub cast iron
- approximately 7" bottom of C.I. to bottom of module (connection at grade)
  - approximately 3'-3" level one to mezzanine level
  - approximately 2'-7" mezzanine level to plenum level
- Vent line: 3" no-hub cast iron
- approximately 7" bottom of C.I. to bottom of module (connection at grade)
  - approximately 3'-3" level one to mezzanine level
  - approximately 2'-7" mezzanine level to plenum level

## MEP Specifications & Security Equipment (cont)

### Electrical

Electric system:	120 V
Wiring:	#12 Copper THHN, metallic conduit
Illumination:	30" above FF: average 30 FC at desk, grooming area, entrance area.
Control:	Central on for light and night light
Power junction box:	Surface mounted double gang junction box in utility chase (with wiring from cell light fixtures by Tindall, connection to site power and control by others)
Fixtures:	Kenall SSA with (2) F32T8 lamps and a night light

<b>Connection materials:</b>	per project specifications, supplied and installed by others
Power junction box:	Approximately 10 <sup>ft</sup> floor to floor materials by others: surface mounted conduit, boxes, and wire

### Security

Swing door:	Slate high security 12 gauge hollow metal
Security lock prep:	Southern Steel 10120A, Brinks A5022, Folger Adams 122, Airteq 9700-1 (lock by others)
Food pass lock prep:	17 Series: Folger Adams 17, Southern Steel 1017, Adtec 4017, Airteq 5017, Brink 7017, 9017, & 9025 (lock by others)
DPS prep:	Frames and doors are prepped to receive Southern Steel 240 DPS (DPS by others)
Security junction box:	Cast-in double gang box accessible from chase
Intercom/call box:	Cast in triple gang box with conduit to utility chase (intercom, call button and/or security cover by others)

<b>Connection materials</b>	per project specifications, supplied and installed by others
Security junction box:	Approximately 10 <sup>ft</sup> floor to floor (materials by others, surface mounted conduit and boxes)
Intercom/call button:	Approximately 7 <sup>ft</sup> left cell to right cell (materials by others, surface mounted conduit and boxes)

<b>Important note:</b>	Universal lock pocket cover plate and door strike furnished by Tindall, installed by others.
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