EQUIPMENT
ELECTRONIC PODIUM
U of T STANDARD TEACHING STATION

0   DESCRIPTION

The Teaching Station (TS) is the standard University of Toronto Electronic podium.
It is to be standard equipment in all rooms 100+ capacity and optional in smaller rooms. The power and data feed in through the floor, coming up under the footprint of the unit. The Station requires 4 data network feeds, one A/V cable to communicate with the ceiling projector, and has a public duplex power receptacle on each side in addition to the power required for the unit itself. The TS unit is typically supplied and installed by UofT after room construction & cleanup is complete. The TS is fixed equipment to be bolted to the floor.

1   SPACE ALLOCATION

1.1

Width:	31.5"
Depth:	28.5"
Top edge height:	43"
Main work surface height:	37"
Retractable shelf height:	33.5"

1.2 Unit Position

Clearance from Wall	4'	1200mm	minimum
	5'+	1500mm+	prefer

1.3 Conduit feed (floor)

Max. height above floor surface	1"	25mm	*** ideally flush with floor

1.4 Conduit Position

Clearance from Wall	6'	1800mm	minimum
	7'+	2100mm+	prefer

Conduit feed is underneath front portion of Station (within footprint of TS), towards the side of the TS which faces the classroom. This allows greatest flexibility in placing the TS on top of the feed.

2   CONFIGURATION

2.1
Room Type
Standard in all classrooms capacity 100+
Optional in classrooms below capacity 100

2.2
Spatial Relationships
Clearance from projection wall: min. 48", prefer min. 60" / 1500mm or more
Clearance from side wall: by project. Prefer min 3'

2.3
Visual Relationships
Locate to one side of main screen
Professor position should not block student's view of projected image

***** CONDUIT / EQUIPMENT LISTINGS ARE GENERIC GUIDELINE SPECIFICATIONS
    ACTUAL SPECIFICATIONS ARE TO BE <u>BY PROJECT PER PROJECT A/V GROUP</u>**

**3.1
Typical Conduit List**

DATA and POWER	Floor trench, from building power and network closet to underside of TS
VIDEO	TS to ceiling projector (CAT6 or other)
SPEAKER	TS amplifier to ceiling speaker daisy chain
SCREEN (optional)	TS to power screen <u>and</u> wall-mount manual switch to screen
LIGHTING (optional)	TS to room lighting (electronic control, <u>in addition</u> to manual switches)

**3.2
Conduit Sizes (typical)**

NETWORK: ¾" conduit for four data cables from the teaching station to the network closet

VIDEO: 2" conduit (minimum 1 ¼") to carry the signal from the teaching station to the projector using CAT6/RS232 cable (carries control cable, composite video cable and optional lift cable)

SPEAKERS: ¾" conduit from the teaching station amplifier to the speakers

SCREEN CONTROL: ¾" conduit for screen control from the TS to the screen low voltage controller (electronic screen control). Additional conduit from wall mounted manual screen control switch (located in vicinity of TS) to screen (manual screen control)

LIGHTING: 1" conduit for electronic screen control. This <u>in addition</u> to manual wall switches.

**3.3
Conduit Termination ('Termination Box') under TS**

Typical conduit termination is a 'Termination Box': a block with standard connection receptacles for A/C & network and open access to conduit for AV control and speaker cables.
Project may specify hard-wired connection from Termination Box to public power receptacles on sides of TS.
2nd A/C circuit at floor termination is standard duplex receptacle for plugging in a power bar, for powering equipment inside the TS.
Termination Box ideally is flush to the floor. If this is not possible, it may protrude above flush by 1".
Protruding higher than 1" will prevent leeway in positioning TS over the Termination Box.

**3.4
Other**
Phonic Ear required on classrooms above 75 capacity
Teaching Station is (U of T) owner supplied equipment

3.5
Equipment (typical)

*** CONDUIT / EQUIPMENT LISTINGS ARE GENERIC GUIDELINE SPECIFICATIONS
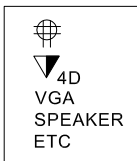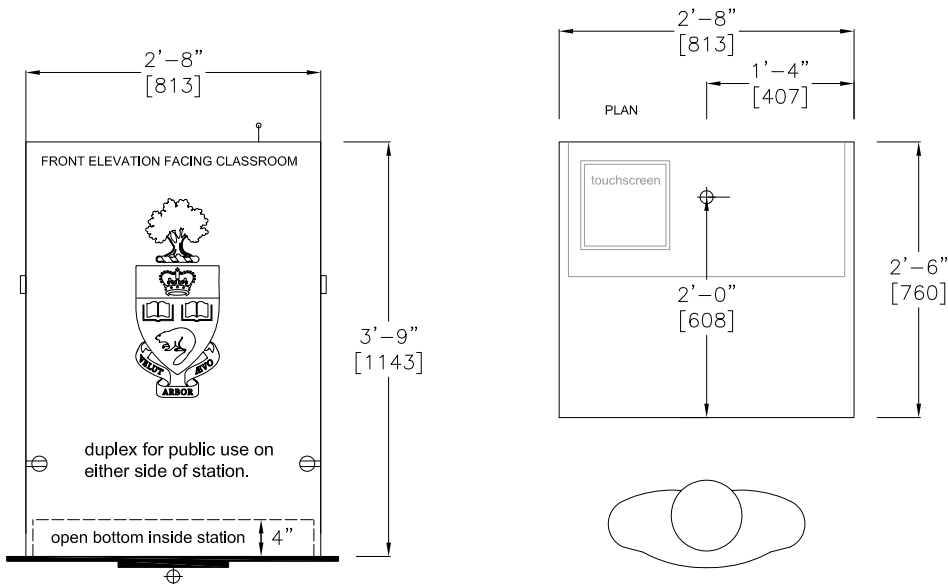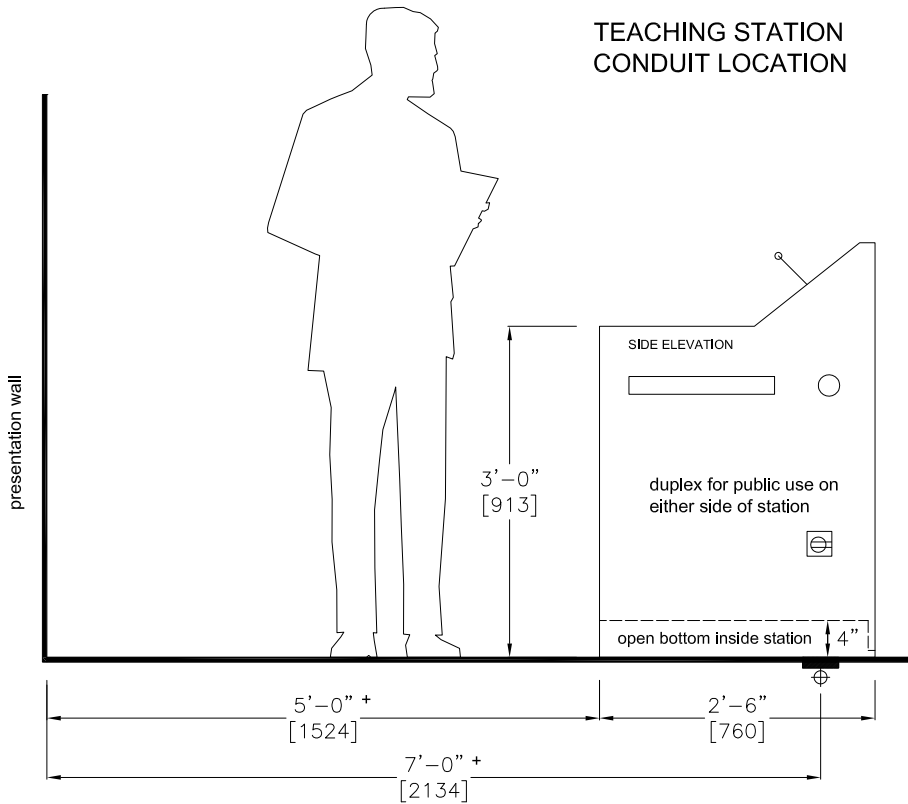   **ACTUAL SPECIFICATIONS ARE TO BE <u>BY PROJECT PER PROJECT A/V GROUP</u>**

Make	Model	Equipment
CRESTRON	MPS-200	CPU & SWITCHER
CRESTRON	TPS-15G QML	MONITOR & TOUCH CONTROL
		DATA PROJECTOR / MOUNTING & SECURITY KITS
		LIFT
CRESTRON	CRE-STIO	Crestron Relay Interface
		LOW V. CONTROL / SCREEN
Samsung or JVC		VHS / DVD COMBO / INFRARED LED XANTECH BLINK-IR 283M
SHURE	MX 418/S	PODIUM GOOSENECK MIC.
SHURE	SLX 14/93	WIRELESS MIC. / MOUNTING KIT
SHURE	MPS-DFR22	FEEDBACK SUPPRESSOR / MOUNTING KIT
TOA		SPEAKERS / CEILING OR WALL
TOA	A-724	70 Volt Am
PHONIC EAR	PE506T	TRANSMITTER / MOUNTING KIT
PHONIC EAR	PE506R	6 CHANNEL RECEIVER
PHONIC EAR	AT-538-S	EAR BUDS
9 DIGITS		STANDARD PODIUM MILLWORK (CASE)
OTHER		STORAGE SHELF WITH CABINET E.LOCK./POWER SUPPLY, READING LIGHT
OTHER		ETHERNET INTERCOM, DOOR STATION (AIPhone) AUX PLATE / 3RCA / D15 & AUDIO/
OTHER		NET WORK CAT6/USBX4 AC POWER PLUGS
OTHER		POWER BAR
DELL	GX 760	DESK TOP COMPUTER: WINDOWS, MS OFFICE 2007+

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TEACHING STATION
CONDUIT LOCATION

presentation wall

SIDE ELEVATION

3'-0"
[913]

duplex for public use on
either side of station

open bottom inside station   4"

5'-0" +
[1524]

2'-6"
[760]

7'-0" +
[2134]

FRONT ELEVATION FACING CLASSROOM

2'-8"
[813]

duplex for public use on
either side of station.

open bottom inside station   4"

3'-9"
[1143]

PLAN

2'-8"
[813]

1'-4"
[407]

touchscreen

2'-0"
[608]

2'-6"
[760]

CONDUIT STUB
FLUSH TO FLOOR IF POSSIBLE
OTHERWISE EXTUDE NO MORE
THAN 1.5" / 40mm FROM FLOOR
TO ALLOW FOR LEEWAY IN
POSITIONING STATION OVER
TOP

4D
VGA
SPEAKER
ETC

DISTANCE FROM PROJECTION WALL TO TEACHING STATION
1200mm / 4' absolute minimum
1500mm / 5' recommended minimum <60 classroom
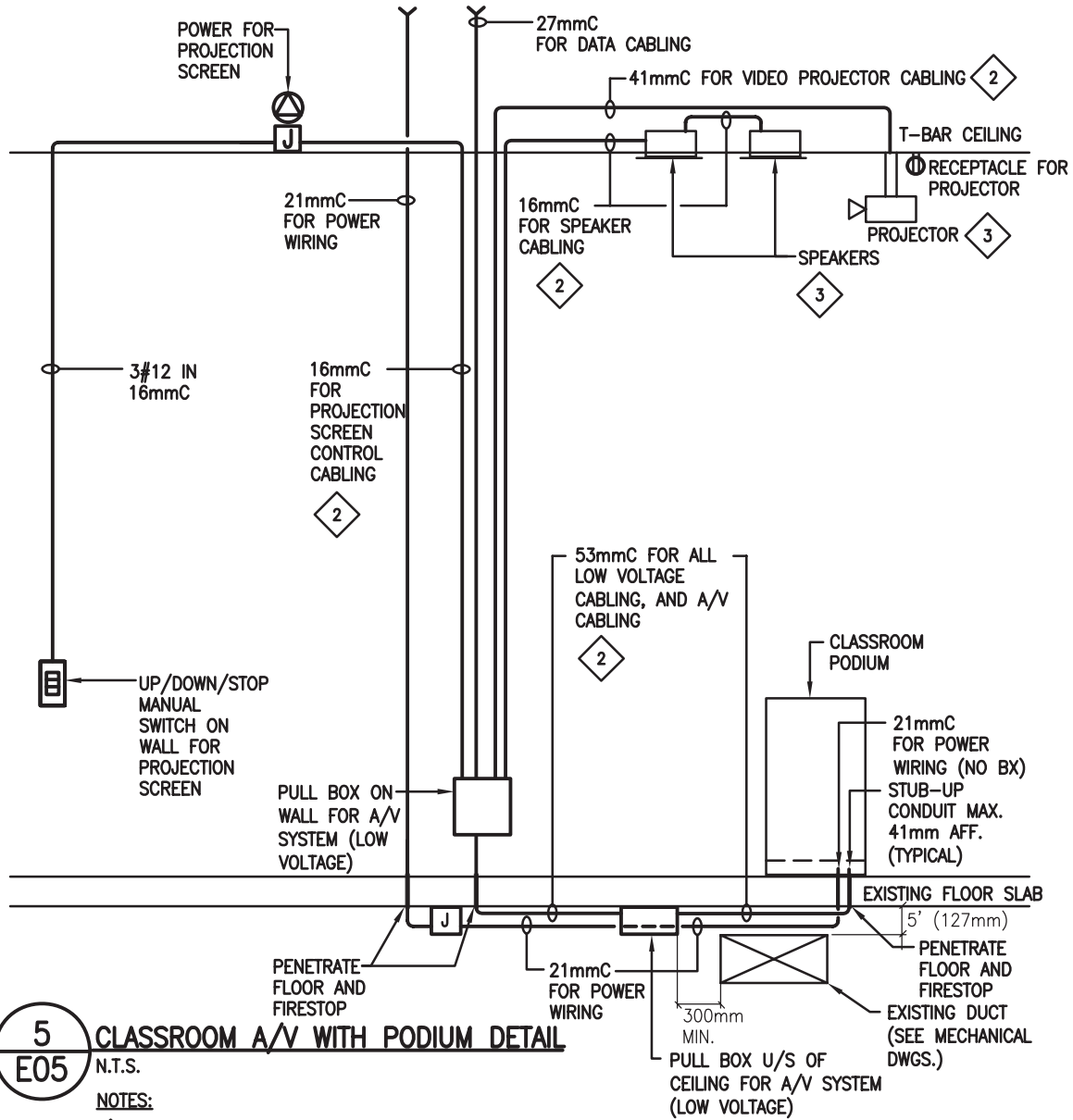1800mm / 6' recommended minimum >60 classroom

DISTANCE PROJECTION WALL TO CONDUIT (CENTER TARGET)
add 600mm / 2' to above #'s

DISTANCE FROM SIDE WALL TO TEACHING STATION
No set figure. Recommend minimum 3'

DISTANCE FROM SIDE WALL TO CONDUIT TARGET
No set figure. Recommend minimum 4 1/2'

TS is usually located to one side of the projection screen
on side furthest from room entrance
and closest to wall mounted light switches / screen control

POWER FOR
PROJECTION
SCREEN

27mmC
FOR DATA CABLING

41mmC FOR VIDEO PROJECTOR CABLING ◇2

T-BAR CEILING

◉ RECEPTACLE FOR
PROJECTOR

21mmC
FOR POWER
WIRING

16mmC
FOR SPEAKER
CABLING

PROJECTOR ◇3

◇2

SPEAKERS

◇3

3#12 IN
16mmC

16mmC
FOR
PROJECTION
SCREEN
CONTROL
CABLING

◇2

53mmC FOR ALL
LOW VOLTAGE
CABLING, AND A/V
CABLING

◇2

CLASSROOM
PODIUM

21mmC
FOR POWER
WIRING (NO BX)

STUB-UP
CONDUIT MAX.
41mm AFF.
(TYPICAL)

UP/DOWN/STOP
MANUAL
SWITCH ON
WALL FOR
PROJECTION
SCREEN

PULL BOX ON
WALL FOR A/V
SYSTEM (LOW
VOLTAGE)

EXISTING FLOOR SLAB
5' (127mm)

J

PENETRATE
FLOOR AND
FIRESTOP

EXISTING DUCT
(SEE MECHANICAL
DWGS.)

PENETRATE
FLOOR AND
FIRESTOP

21mmC
FOR POWER
WIRING

300mm
MIN.

PULL BOX U/S OF
CEILING FOR A/V SYSTEM
(LOW VOLTAGE)

⑤ CLASSROOM A/V WITH PODIUM DETAIL
E05 N.T.S.

NOTES:

◇1 CONTRACTOR MUST X-RAY OR SCAN EXISTING FLOOR SLAB PRIOR TO CORE
DRILL FOR RUNNING CONDUITS IN CEILING SPACE BELOW. COORDINATE WITH U OF T
PROJECTOR MANAGER OF SCHEDULING AND APPROVAL PRIOR TO X-RAY THE FLOOR SLAB.

◇2 U OF T WILL SUPPLY A/V CABLES. THIS CONTRACTOR TO INSTALL. COORDINATE WITH U
OF T FOR EXACT QUANTITY OF CABLES FOR A C/W SYSTEM.
A/V CABLES:
VGA CABLE FOR PROJECTOR, FT6 INSULATION CAT 5E, AND VIDEO CABLE RG6
STANDARD AUDIO CABLE FOR SPEAKERS 14 GAUGE
3-CONDUCTOR CONTROL CABLE FOR PROJECTION SCREEN 24 GAUGE

◇3 COORDINATE WITH U OF T FOR EXACT LOCATION OF A/V EQUIPMENT PRIOR TO START
THE ROUGH-IN WORK.

◇4 SEAL ALL GAPS BETWEEN CONDUIT AND FLOOR SLAB WITH FIRE STOPPER MATERIAL.