

Note that the door is not a part of the Immersive Room Package and that the door should open outwards.

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119076.02 TELEPRESENCE T3 ROOM REQUIREMENTS 12.08

The Room Requirements Description presents the room dimensions requirements, weights, wall- and ceiling loads, power outlet requirements as well as the heating, ventilation and air-conditioning (HVAC) requirements for the TANDBERG Telepresence T3 system.

Independent of whether customers plan to install a TANDBERG Immersive Room, or create their own, this document is important to read.

Note that the entrance door is **not** a part of the TANDBERG Immersive Room package. The door should open outwards.

### ROOM DIMENSIONS

#### Overall system dimensions:

2800 mm × 4800 mm / 9' 2 1/4" × 15' 9" (d × w)

#### Optimal room dimensions (immersive room):

4680 mm × 7170 mm / 15' 4 1/4" × 23' 6 1/4" (d × w)

**Room Height:** 2550 mm / 8' 4 3/8"

### WEIGHT AND LOAD REQUIREMENTS

Weight of total system: 1.075 kg  
Weight of Wooden Wall panels: 15 kg/m<sup>2</sup> (0.021lbs/inch<sup>2</sup>)  
Weight of Glass Wall Panels: 60 kg (132 lbs)  
The Floor load for the glass panels: 240 kg (528 lbs) / 8 adjustable legs  
(A = 314 mm<sup>2</sup>) 0.76 kg/mm<sup>2</sup> (135 lbs/inch<sup>2</sup>)

#### Wall Load for sidewalls: (for maximum size room)

Wall load for front/back wall (3.9 m<sup>2</sup>): 15 × 3.9 = 58.5 kg (129 lbs)  
Wall Load for side wall (11.47 m<sup>2</sup>): 15 × 11.47 = 172 kg (378 lbs)

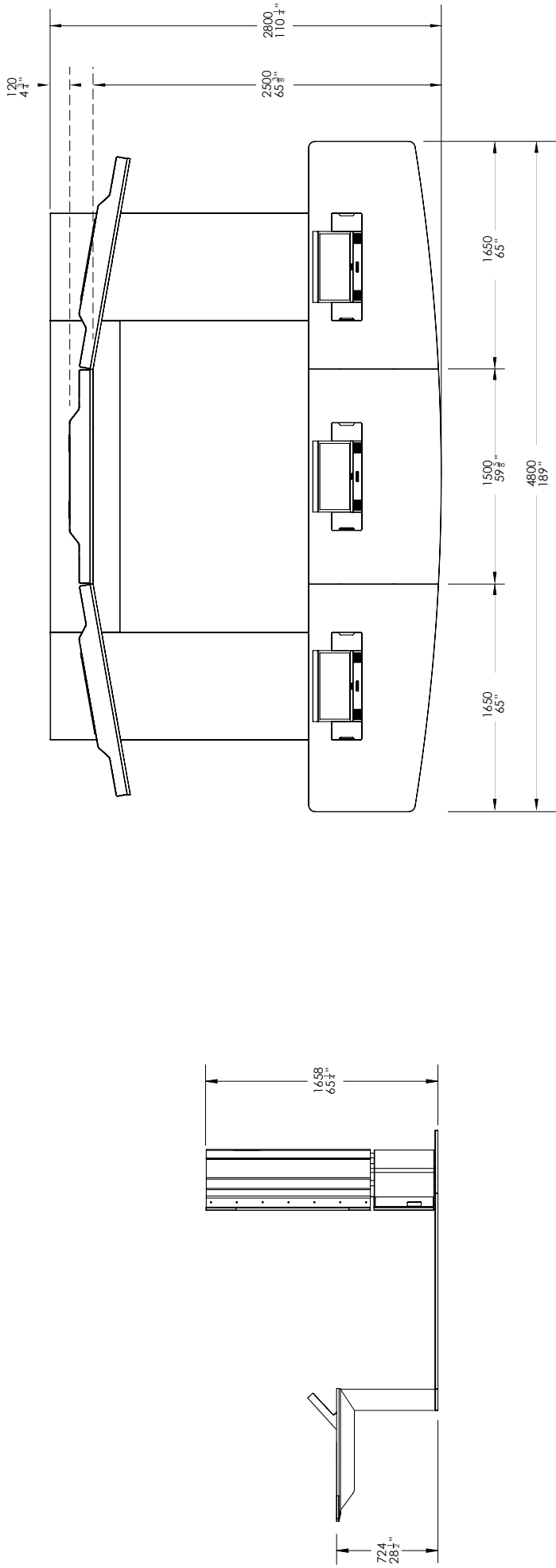
#### Ceiling Load:

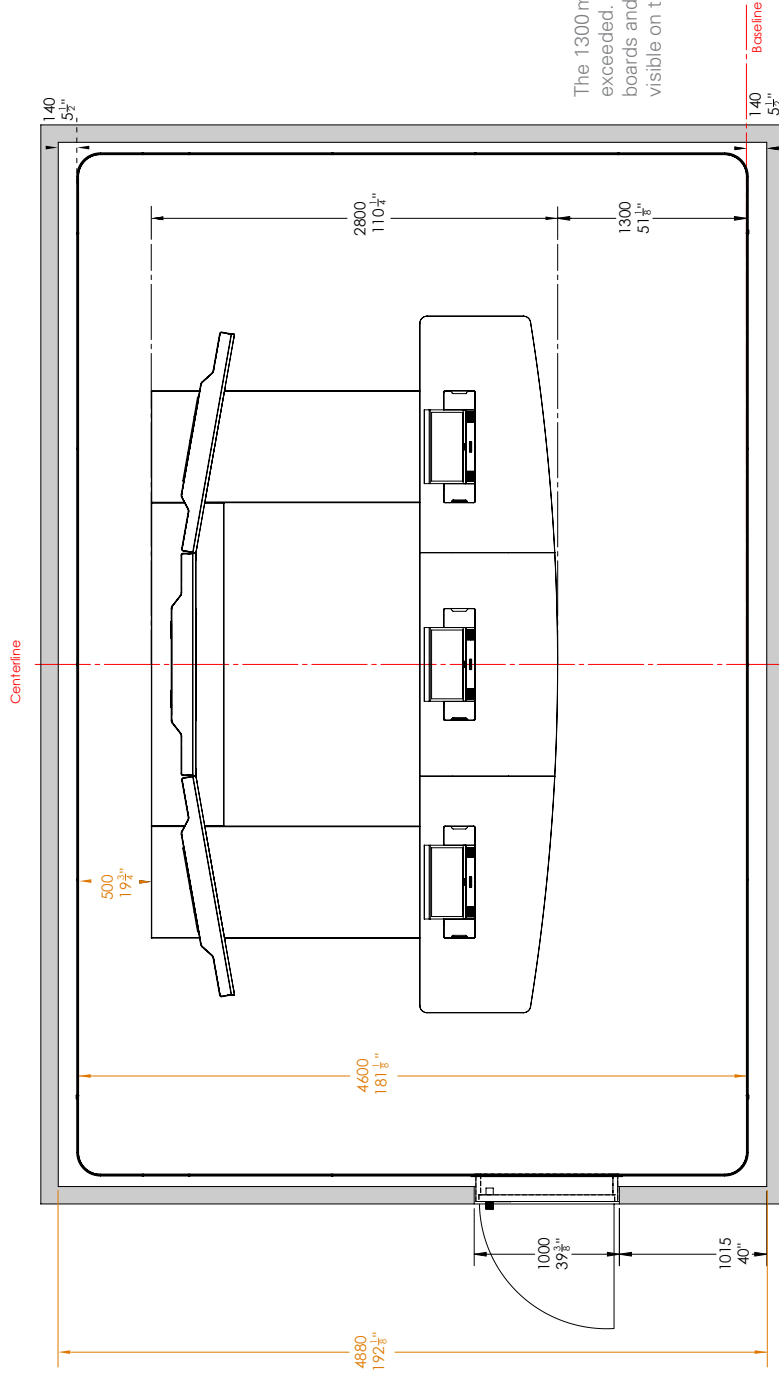
Ceiling lights: 42 kg (92 lbs)  
Document camera: 12 kg (26 lbs)

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# SYSTEM DIMENSIONS

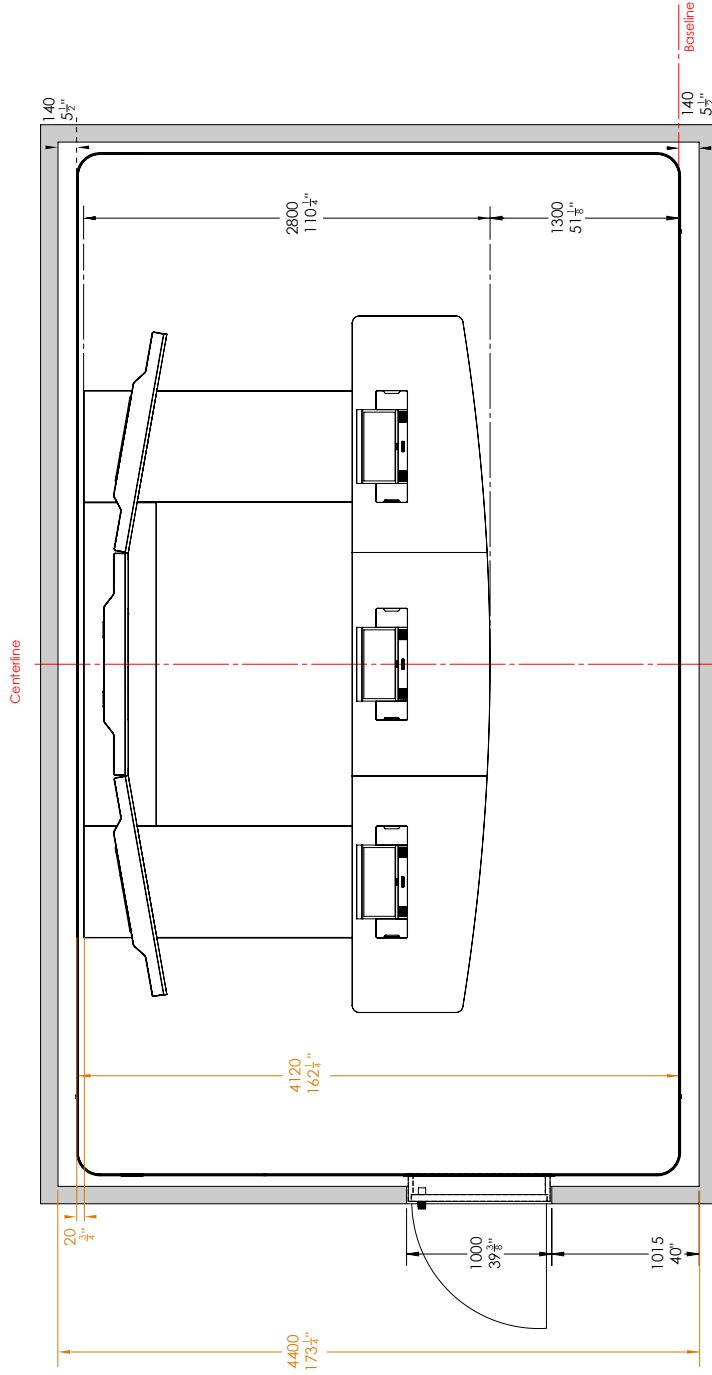




The 1300 mm is vital and should not be exceeded. Otherwise the floor, the skirting boards and the wooden panels start to become visible on the screen image.

**Note!** The door is not a part of the TANDBERG Immersive Room Package. The door should be mounted so that it opens outwards.

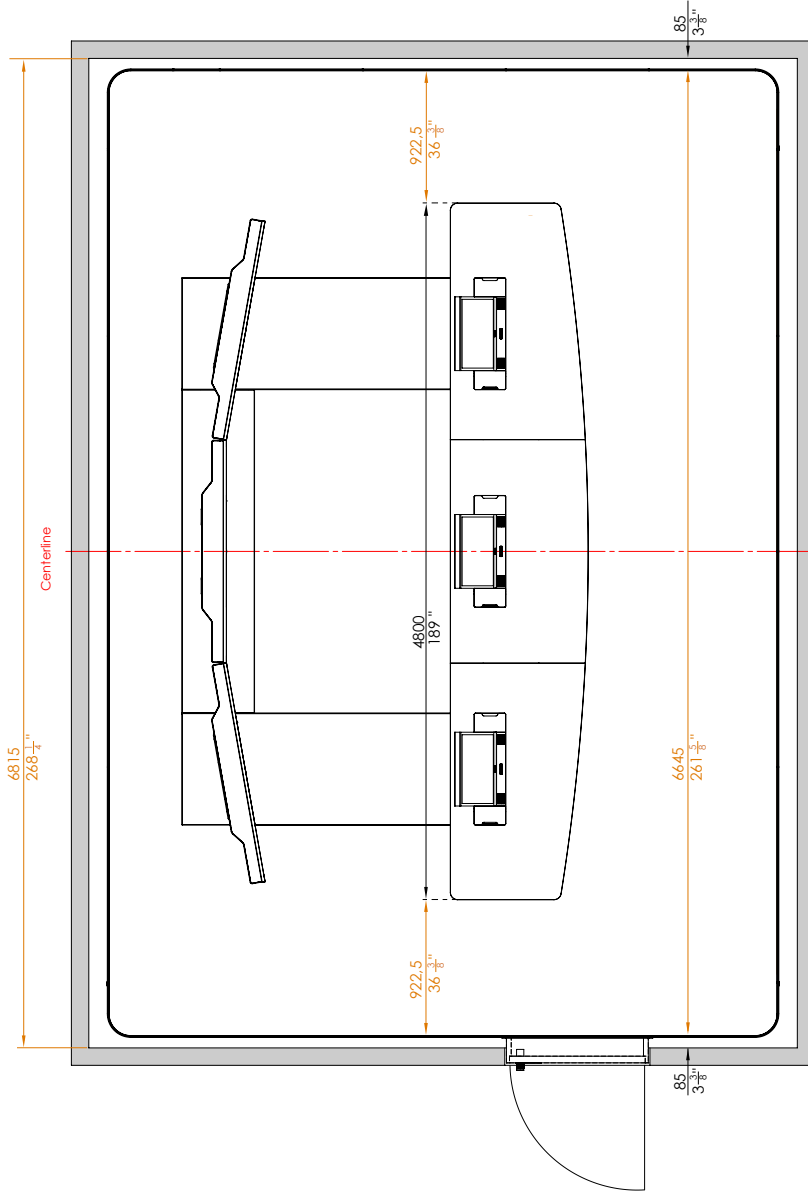
# MINIMUM ROOM DEPTH REQUIREMENTS



Observe that if the room gets smaller, the space between the table and backwall will be tight

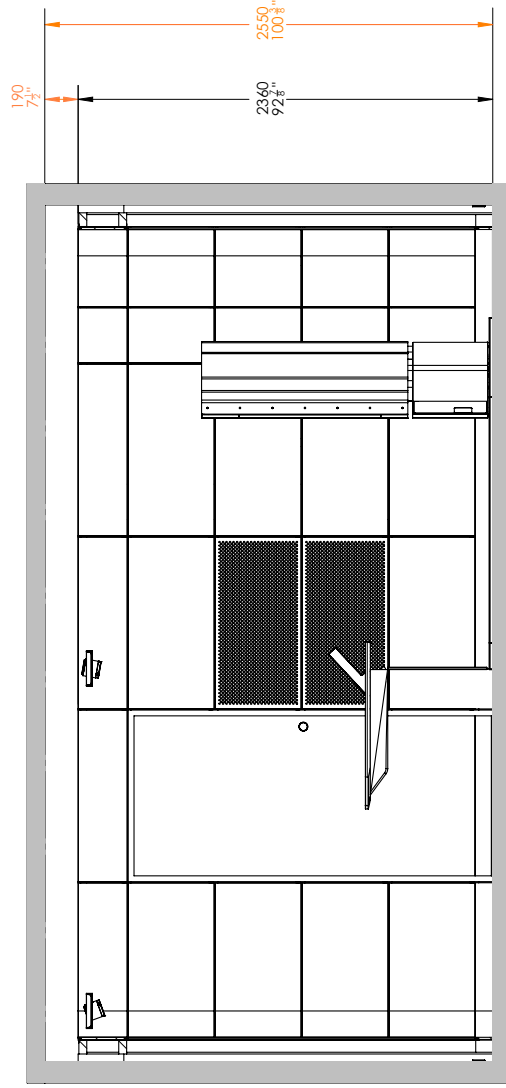
**Note!** The door is not a part of the TANDBERG Immersive Room Package. The door should be mounted so that it opens outwards.

# MINIMUM ROOM WIDTH REQUIREMENTS



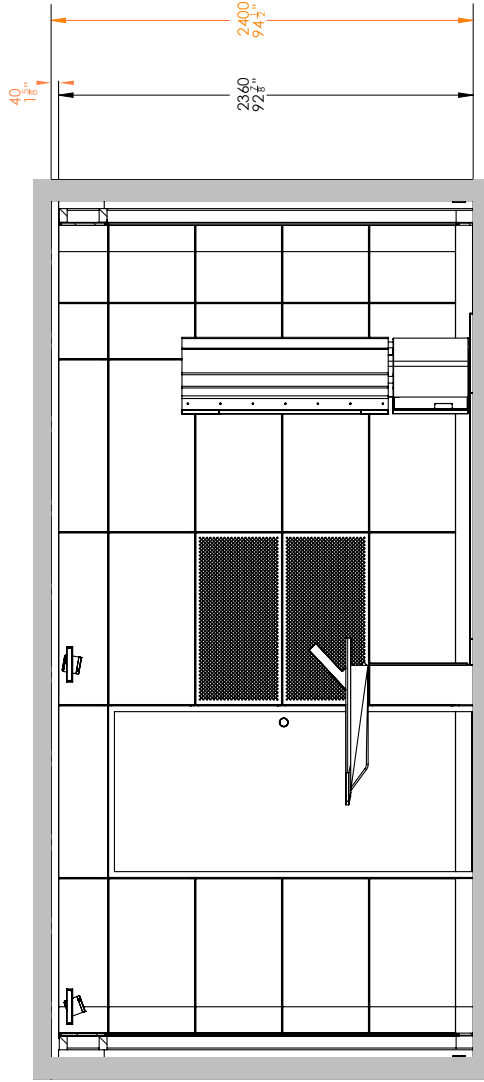
Observe that the room should not have a smaller width than shown since that will prevent a proper installation of the wooden corner panels.

**Note!** The door is not a part of the TANDBERG Immersive Room Package. The door should be mounted so that it opens outwards.



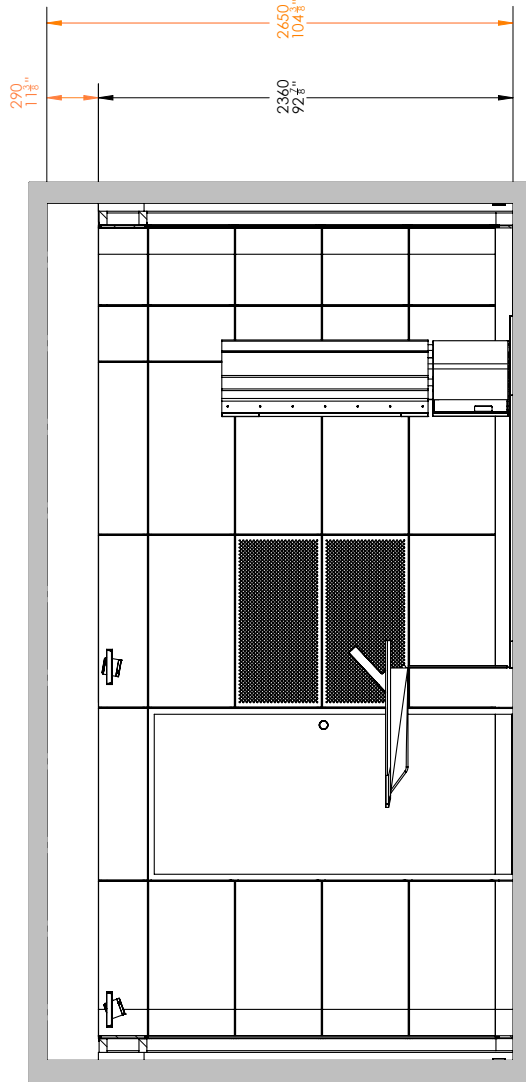
Note that the room is shown with the Telepresence T3 system installed.

## MINIMUM ROOM HEIGHT REQUIREMENTS



Note that the room is shown with the Telepresence T3 system installed.

## MAXIMUM ROOM HEIGHT



Note that the room is shown with the Telepresence T3 system installed.



# TANDBERG Telepresence T3

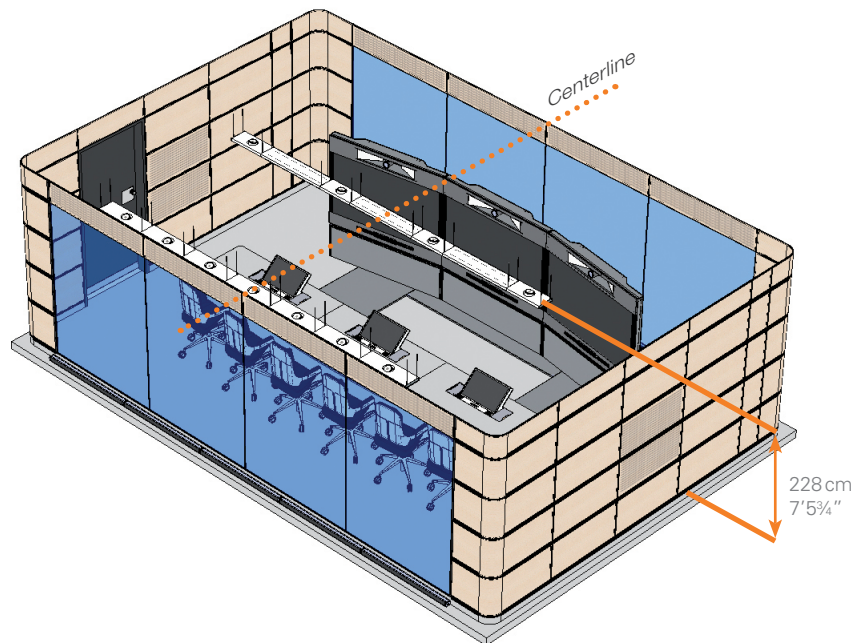
## HVAC REQUIREMENTS

**Tip!** An average person emits approximately 65W at rest. You may want to consider this when calculating the HVAC requirements.

**Note:** Dimensions are between floor and underside of light modules.

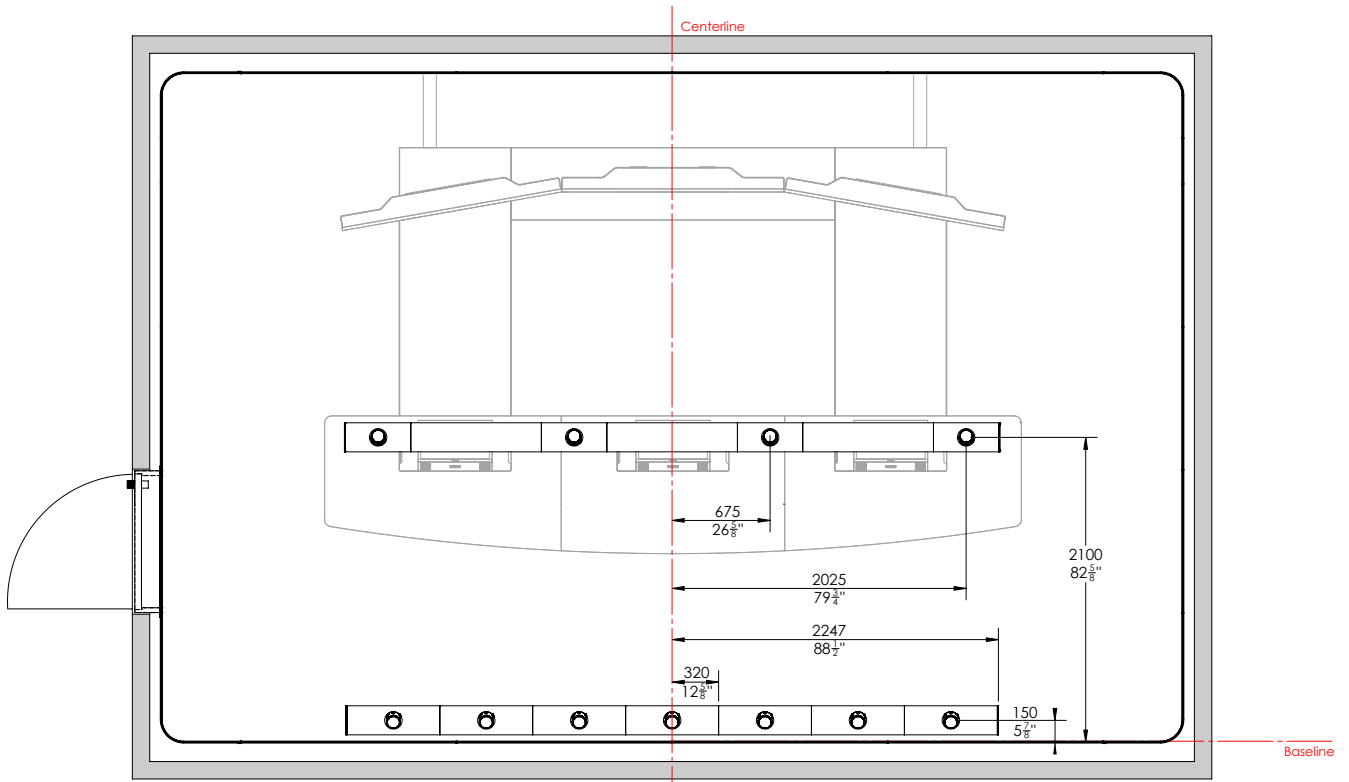
The following HVAC (heating, ventilation, air-conditioning) requirements apply to the TANDBERG Telepresence T3:

- Power consumption System: 1725 W
- Power consumption Table: 300 W
- Power consumption Lighting: 1300 W
- Noise from air-conditioning should be less or equal to 27 dB(A) measured at all seating positions.

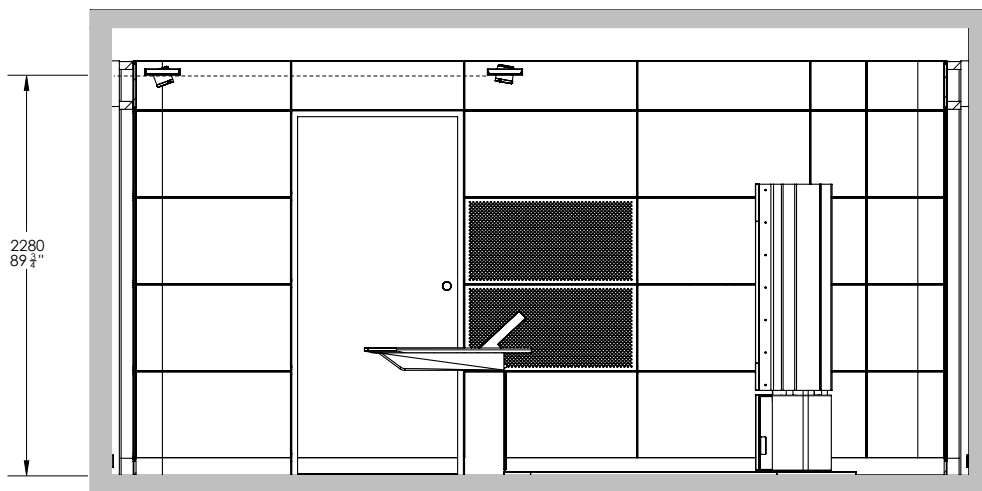


Make sure that HVAC mounting neither conflicts with the ceiling lights positions nor the document camera position.

A detailed drawing of the ceiling mounting of the lights can be found overleaf, while the drawing 119082 on page 14 shows the position of the document camera.



Make sure that HVAC mounting neither conflicts with the ceiling lights positions nor the document camera position. The drawing 119082 on page 14 shows the position of the document camera.



## ACOUSTICS REQUIREMENTS

It is essential to have a good acoustic environment for the system to provide the true telepresence experience. This means that there should be sufficient sound insulation to minimize noise from adjacent rooms and to ensure that confidential information is kept within the meeting room. A good choice of acoustic materials for the surfaces and low background noise will ensure comfort in long meetings in addition to high speech intelligibility. You may want to contact acoustic specialists when looking into this matter.

### REQUIREMENTS IN GENERAL

All walls around the room should have a sound insulation of  $R'w \geq 48$  dB (corresponding to STC 50).

The door should have a sound insulation of  $Rw \geq 38$  dB.

Background noise level should be less or equal to 30 dB(A). This includes both noise from technical installations (air-conditioning in particular) and outdoor traffic noise etc.

### REQUIREMENTS SPECIFIC FOR IMMERSIVE ROOMS

Absorptive ceiling should have an absorption factor  $\geq 0.9$  in the octave bands 125–4000 [Hz]. This will normally require a mineral wool ceiling of good quality.

### REQUIREMENTS SPECIFIC FOR NON-IMMERSIVE ROOMS

Reverberation time (RT) should be within 0.3–0.6 [s] in the octave bands 125–4000 [Hz].

The acoustic absorption should to some extent be distributed on the walls in addition to the ceiling to avoid flutter-echo effects from parallel walls.

The ceiling is recommended to have an absorption factor  $\geq 0.9$  in the octave bands 125–4000 [Hz]. This will normally require a mineral wool ceiling of good quality.

The walls should at least have sound absorbing fields at the side, front and back walls corresponding to the TANDBERG Immersive Room Package. Both the placement and area should be approximately the same. If perforated or slotted panels are used, the opening area of the panel must be at least 20%.

Sound absorption on walls could also be made with mineral wool wall panels, curtains or other absorptive materials.

## POWER OUTLET FUSE REQUIREMENTS

**Note!** The table lists minimum fuse requirements. All electrical work must be done by electricians with local knowledge.

**Note!** Outside the room—adjacent to the entrance—there shall be an emergency power switch to switch off the power to the entire system and the room.

On the inside adjacent to the exit there shall be a sign with the following text:

**Fire emergency switch is located on the outside of this room.**

The following minimum power outlet fuse requirements apply to the TANDBERG Telepresence T3:

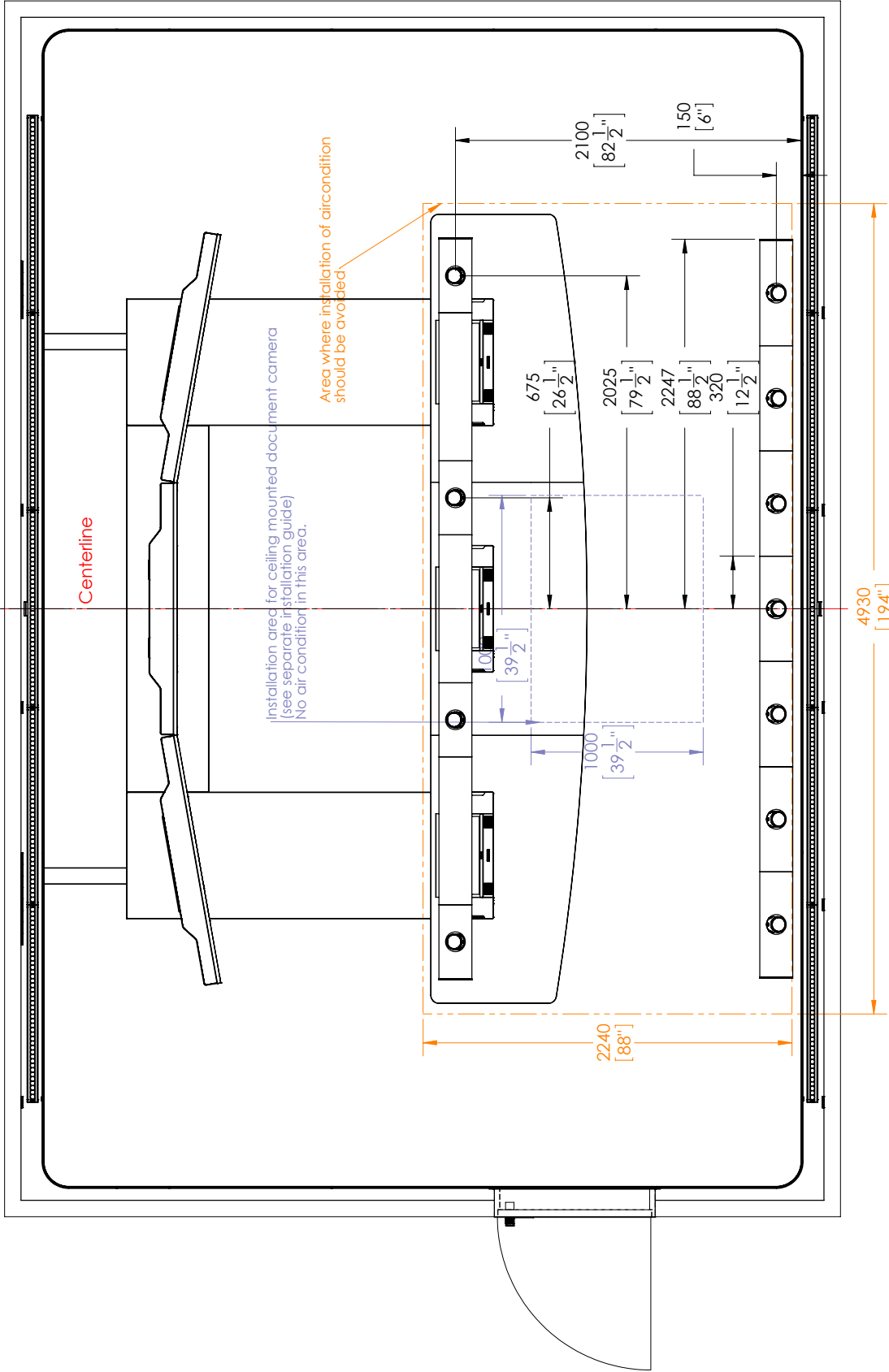
ITEM	WATT	PLACEMENT	FUSE	ON/OFF SWITCH
T1 Module×3	2400	Back wall	A	1
Presentation splitter×2	60	Back wall	A	1
Table power outlet×6	2400	Back wall	B	2
TCU	400	Back wall	C	2
Table quick buttons	50	Back wall	C	2
Presentation input switch	5	Back wall	C	2
Touch collaboration display splitter	20	Back wall	C	2
Touch collaboration display	750	Back wall	C	2
Document camera	300	Ceiling	D	2
T3 Ceiling mounted lights	750	Ceiling	D	3
T3 LED Module	1000	Back- / Front wall	D	4
Total power	9335			

## ELECTRONIC VERSIONS OF TECHNICAL DRAWINGS

The technical drawings on the following pages are also available in electronic formats as pdf, dwg and dxf. To obtain copies of these drawings, send an e-mail to [tandberg@tandberg.com](mailto:tandberg@tandberg.com)

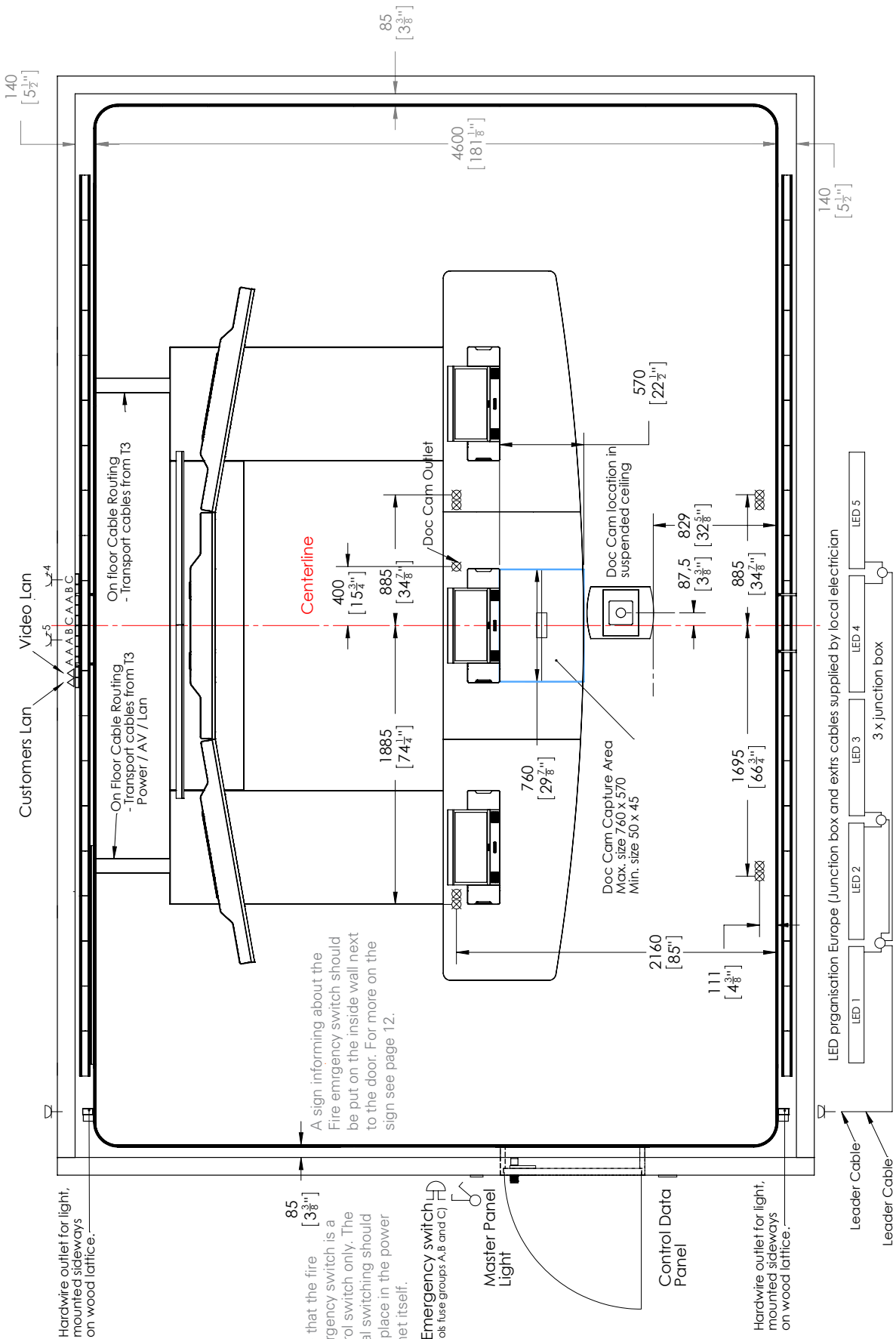
The following drawings are available:

- 119082 T3 Ceiling
- 119083 T3 Electrical System
- 119083-US T3 Electrical System US
- 119084 T3 Furniture Plan
- 119086 T3 Short Structure
- 119087 T3 Long Structure
- 119088 T3 Structural Elements
- 119089 T3 Lighting



<b>TANDBERG</b>		www.tandberg.com	
Doc. Title: T3 Ceiling	Related Tandberg Product - TANDBERG T3	Date: 04.11.08	Revision: 01
Drw. No.: 119082	Sign.:	Unit: mm/"	Scale: 1:25
		Sheet Size: A3	

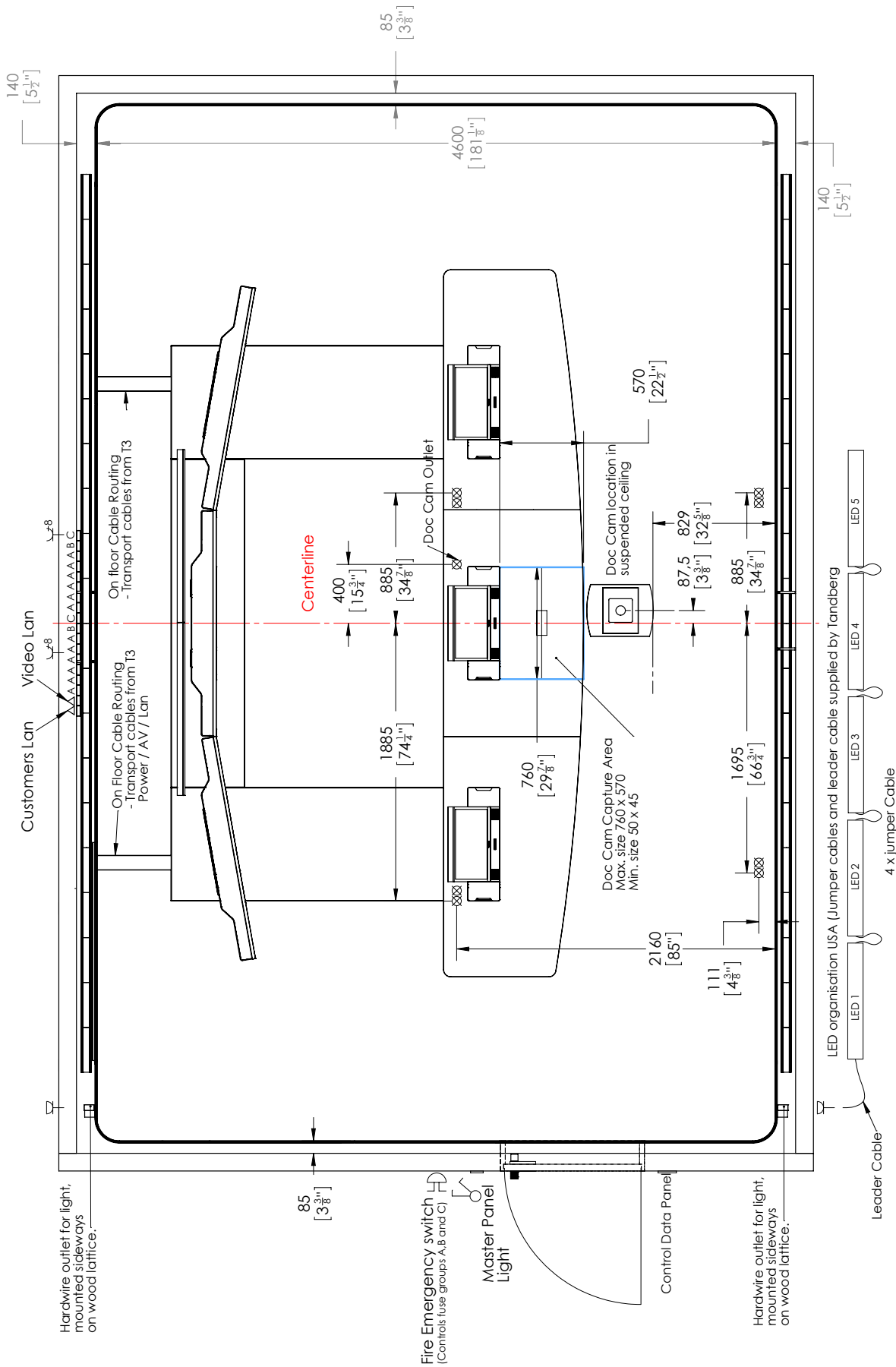
**Note!** The door is not a part of the TANDBERG Immersive Room Package. The door should be mounted so that it opens outwards.



4	4 single power outlets	110V/30A, 220V/16A
5	5 single power outlets	110V/30A, 220V/16A
△	Hardwire outlet - Light	110V/30A, 220V/16A
▽	Lan outlet	
⊗	Ceiling hardwire outlet - Light	110V/30A, 220V/16A

Fuse - Power outlets: A,B,C,D		
Doc Cam, Ceiling lights and LED module : Fuse D		
All Hardwire outlets : Fuse D		

<b>TANDBERG</b>			
www.tandberg.com			
Doc. Title:	T3 Electrical System	Related Tandberg Product -	TANDBERG T3
Draw No.:	119083	Date:	04.11.08 17.11.08 01.12.08
Sign:		Revision:	01 02 03
Unit: mm"		Scale:	1:25
		Sheet Size:	A3



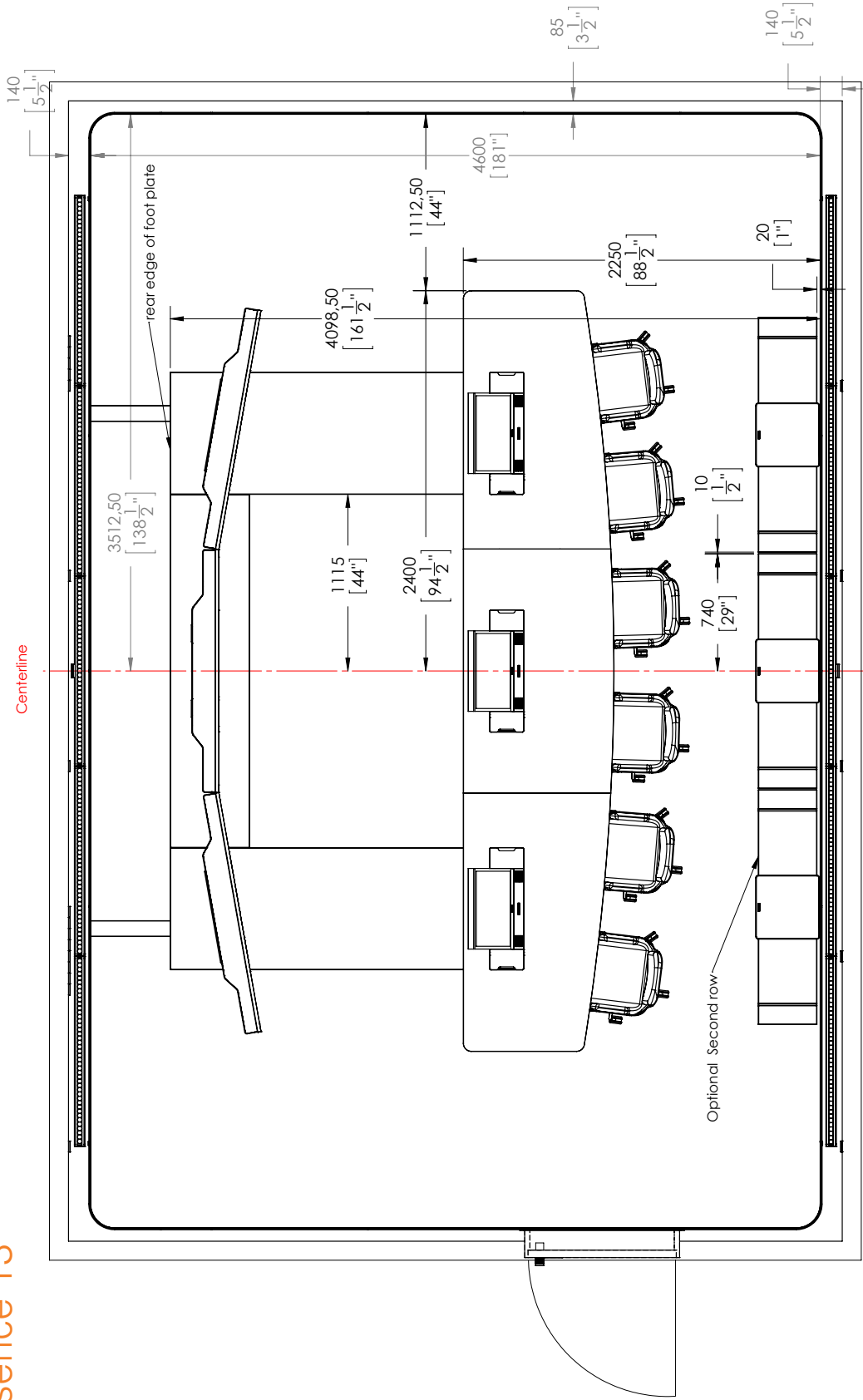
Single power outlet	110V/30A, 220V/16A
8 single power outlets	110V/30A, 220V/16A
Hardware outlet - Light	110V/30A, 220V/16A
Lan outlet	110V/30A, 220V/16A
Ceiling hardware outlet - Light	110V/30A, 220V/16A

Fuse - Power outlets: A, B, C, D  
 Doc Cam, Ceiling lights and LED module : Fuse D  
 All Hardware outlets : Fuse D

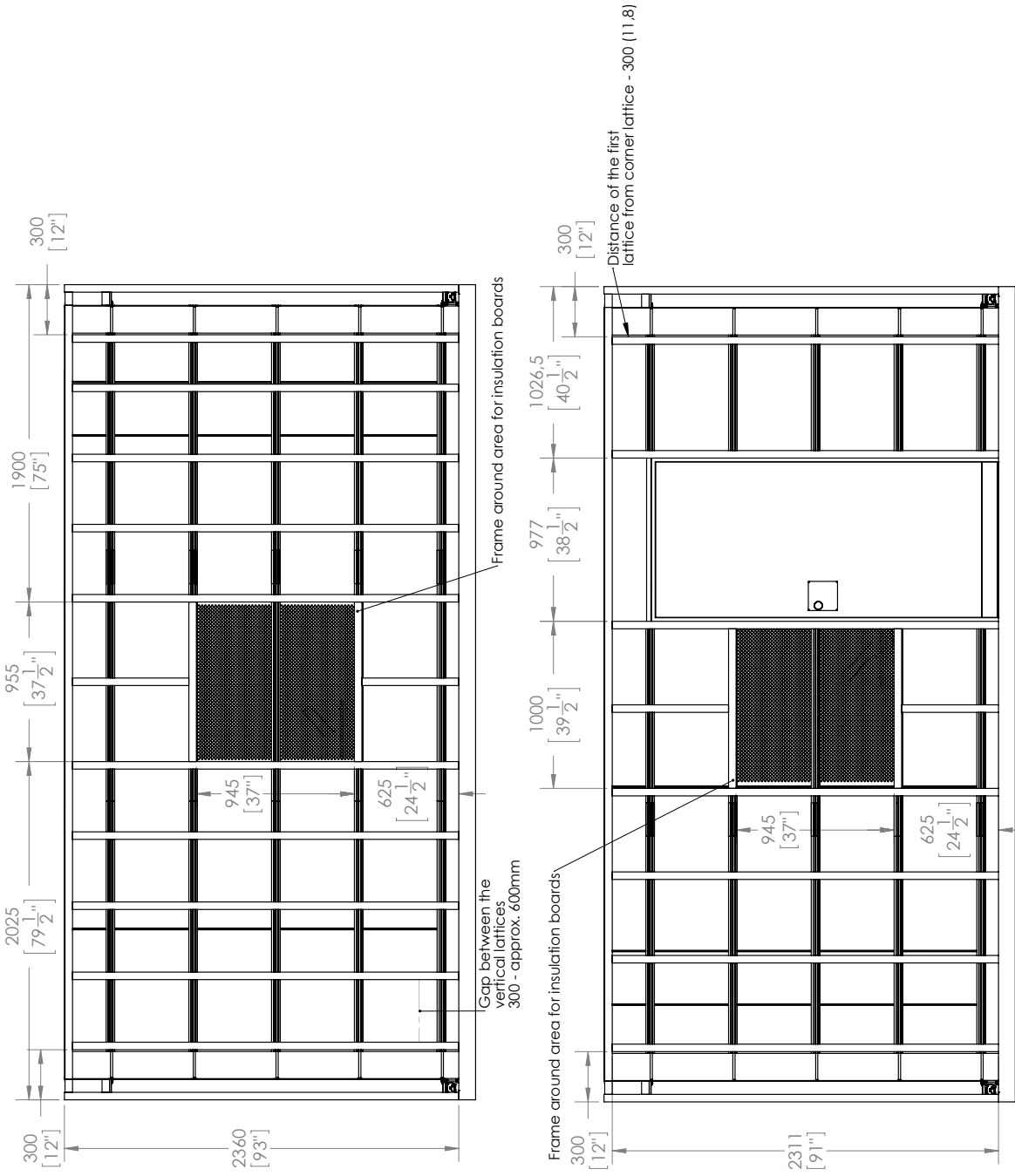
<b>TANDBERG</b>		www.tandberg.com	
Doc Title:	T3 Electrical System US	Related Tandberg Product:	TANDBERG T3
Draw No.:	119083 - US	Date:	04.11.08 17.11.08 01.12.08
Sign.:		Revision:	01 02 03
Unit: mm/"	Scale: 1:25	Sheet Size:	A3



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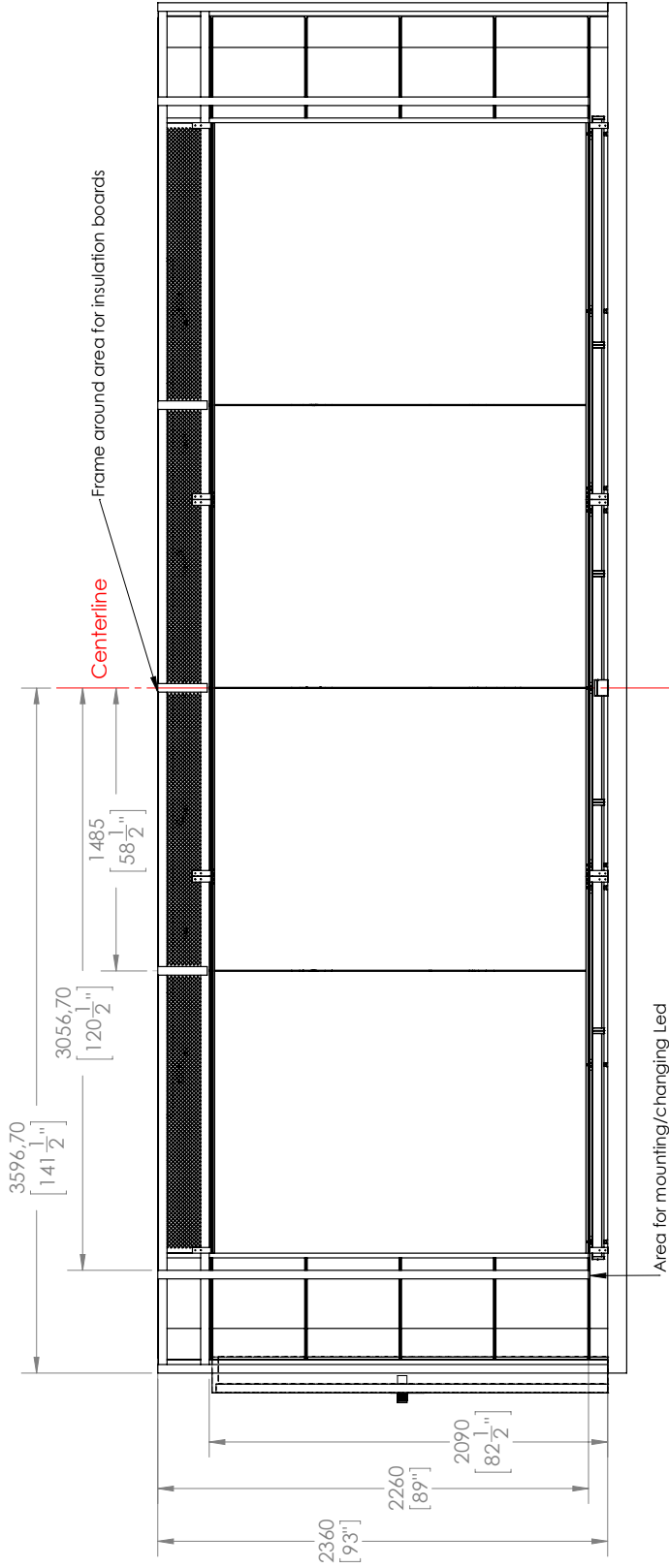


<b>TANDBERG</b>	www.tandberg.com
Doc. Title: T3 Furniture Plan	Related Tandberg Product - TANDBERG T3
Draw. No.: 119084	Date: 04.11.08
Sign.:	Revision: 01
Unit: mm / "	Scale: 1:25
	Sheet Size: A3

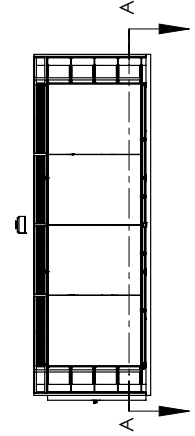
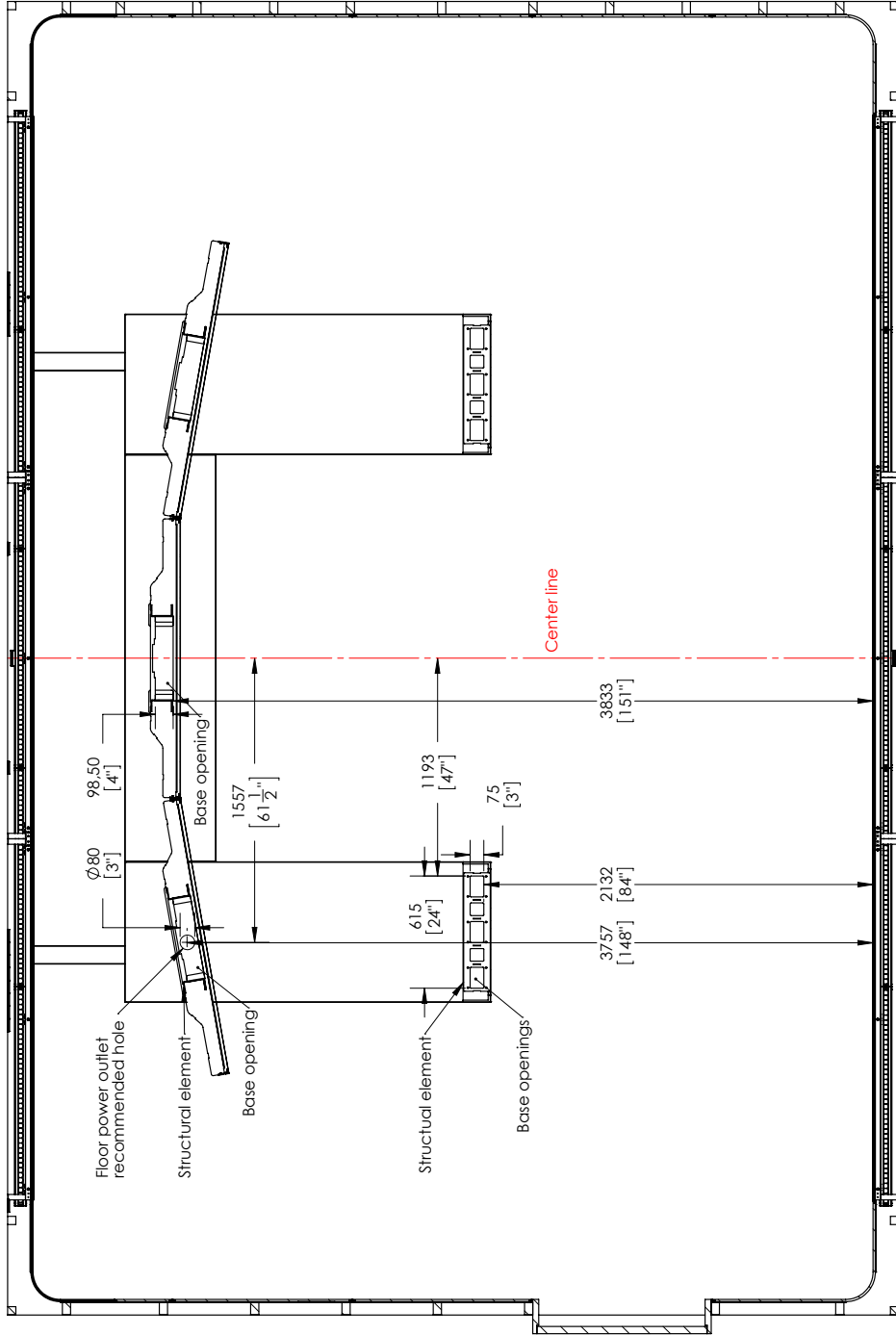


<b>TANDBERG</b>		www.tandberg.com	
Doc. Title: T3 Shorf Structure		Related Tandberg Product - TANDBERG T3	
Draw. No.: 119086		Date: 04.11.08	
Sign:		Revision: 01	
Unit: mm / "		Scale: 1:25	Sheet Size: A3

# TANDBERG Telepresence T3

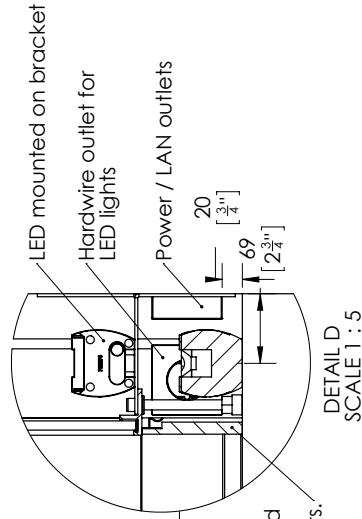
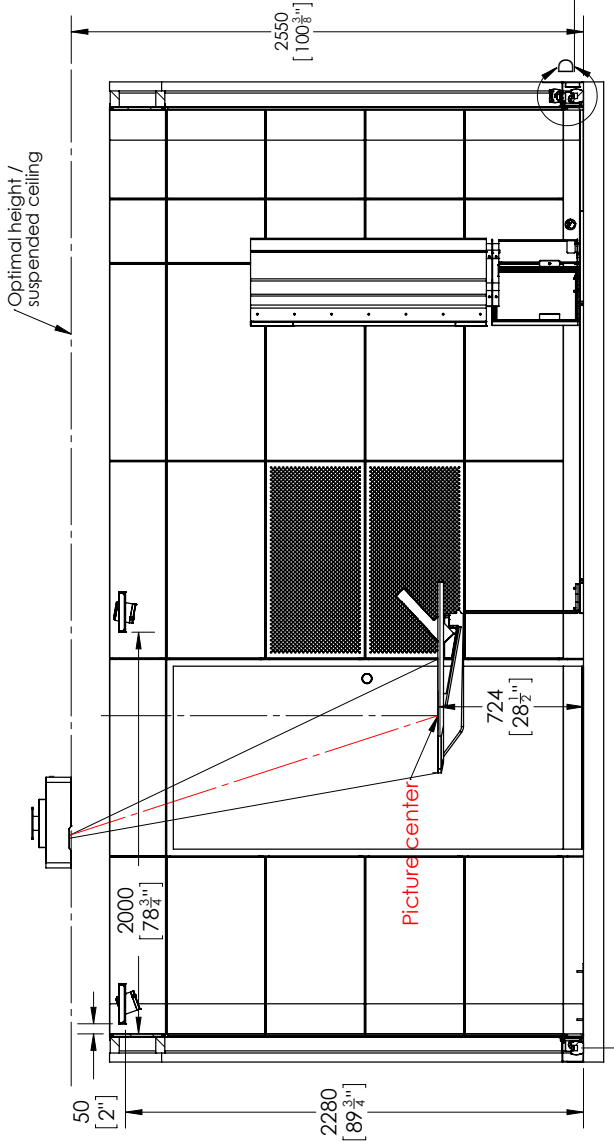
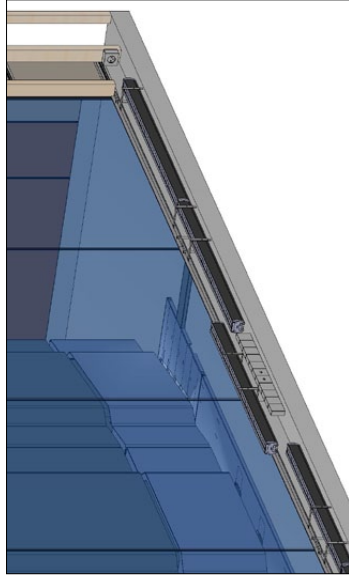


<b>TANDBERG</b>		www.tandberg.com	
Doc. Title:	T3 Long Structure	Related Tandberg Product - TANDBERG T3	
Draw. No.:	119087	Date:	04.11.08
Sign.:		Revision:	01
Unit:	mm / "	Scale:	1:25
		Sheet Size: A3	



<b>TANDBERG</b>		www.tandberg.com	
Doc. Title:	T3 Structural Elements	Related Tandberg Product:	TANDBERG T3
Dwg. No.:	119088	Date:	04.11.08
Sign.:		Revision:	01
Unit:	mm / "	Scale:	1:25
		Sheet Size:	A3

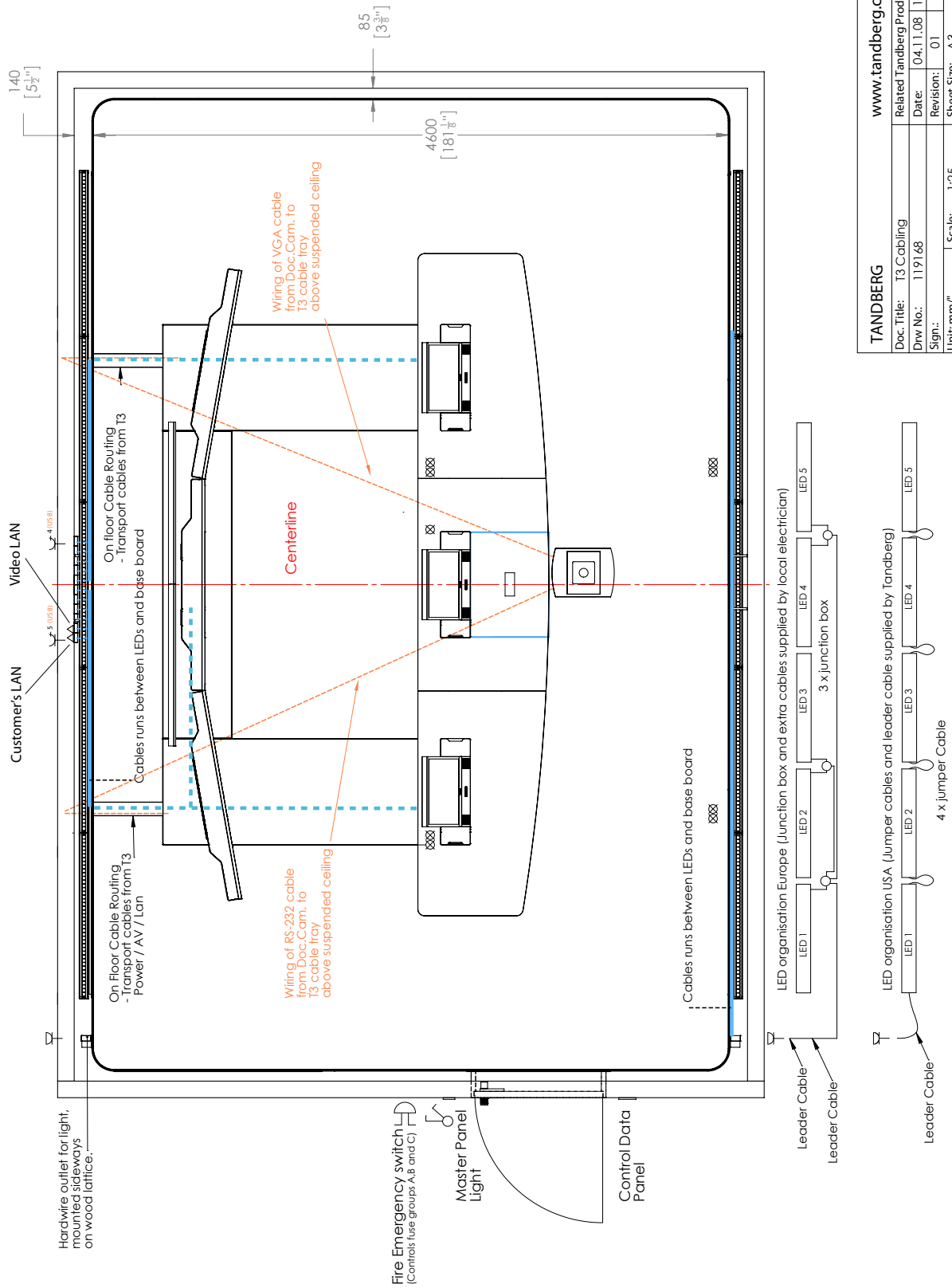
# TANDBERG Telepresence T3



Removable baseboard for access to outlets. Mounted with magnets.

TANDBERG		www.tandberg.com	
Doc. Title:	T3 Lighting	Related Tandberg Product -	TANDBERG T3
Drw. No.:	119089	Date:	04.11.08 17.11.08 01.12.08
Sign.:		Revision:	01 02 03
Unit: mm/"		Scale:	1:25
		Sheet Size:	A3

# TANDBERG Telepresence T3



<b>TANDBERG</b>		www.tandberg.com	
Doc. Title:	T3 Cabling	Related Tandberg Product - TANDBERG T3	
Drv No.:	119168	Date:	04.11.08 17.11.08 01.12.08
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		Sheet Size:	A3

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