

PhotonAssay 1408X System Specification

Primary dimensions:
7.1 (L) × 5.8 (W) × 2.8 [4.9] (H) m

Unit weight:
80,000 kg

- Deployment:**
Three cabins housing all the system sub-components. Ancillary components include:
- Water chiller
 - Four air conditioners
 - Air compressor (*compressed air supplied by client)
 - Power transformer & UPS (region-specific)
 - Operator console & kiosk
 - Infeed and outfeed conveyors
 - Guardrail system

Total power supply:
• 110 kVA total, 3-phase

Concrete slab specifications:
Refer to Sheet 3 for recommendations and info on Slab Requirements.

- Environmental:**
Site requirements:
- Operating temperature range: 5 - 35°C
 - Unit storage temperature range: 0 - 55°C
 - Humidity range: 0% to 95%, non-condensing
 - Unit should be protected from exposure to rain or direct sunlight
 - The UPS and Battery Pack (if required) must be kept clear from excessive dust

- Unit specs:**
- Temperature in cabins controlled between 20 - 25°C
 - Sound level (Average): 65dB
 - Sound level (Peak): <70dB

Spares storage, temporary storage and office space:
Refer to Sheet 5 for requirements and info.

Chiller:
Refer to C101-37-000 - HVAC Specification Layout Drawing.

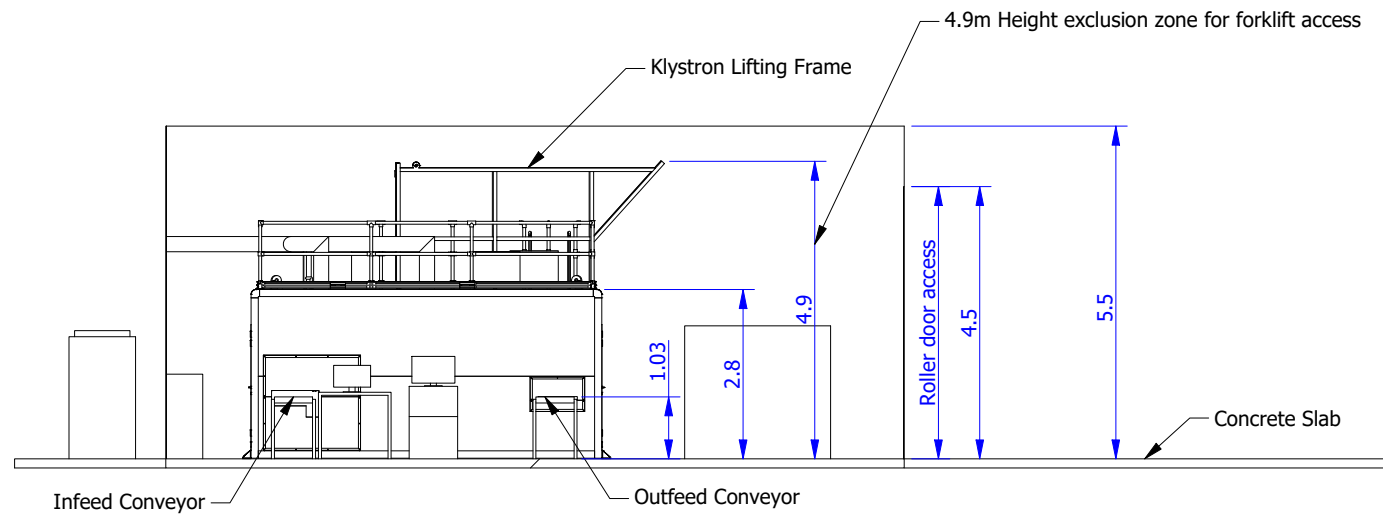
Air conditioners:
Refer to C101-37-000 - HVAC Specification Layout Drawing.

Compressed air supply:
The requirements for each system are:

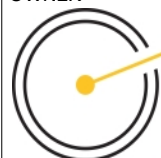
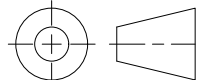
- Max working pressure: 1MPa
- Free air delivery (air flow): 0.63 m3/min

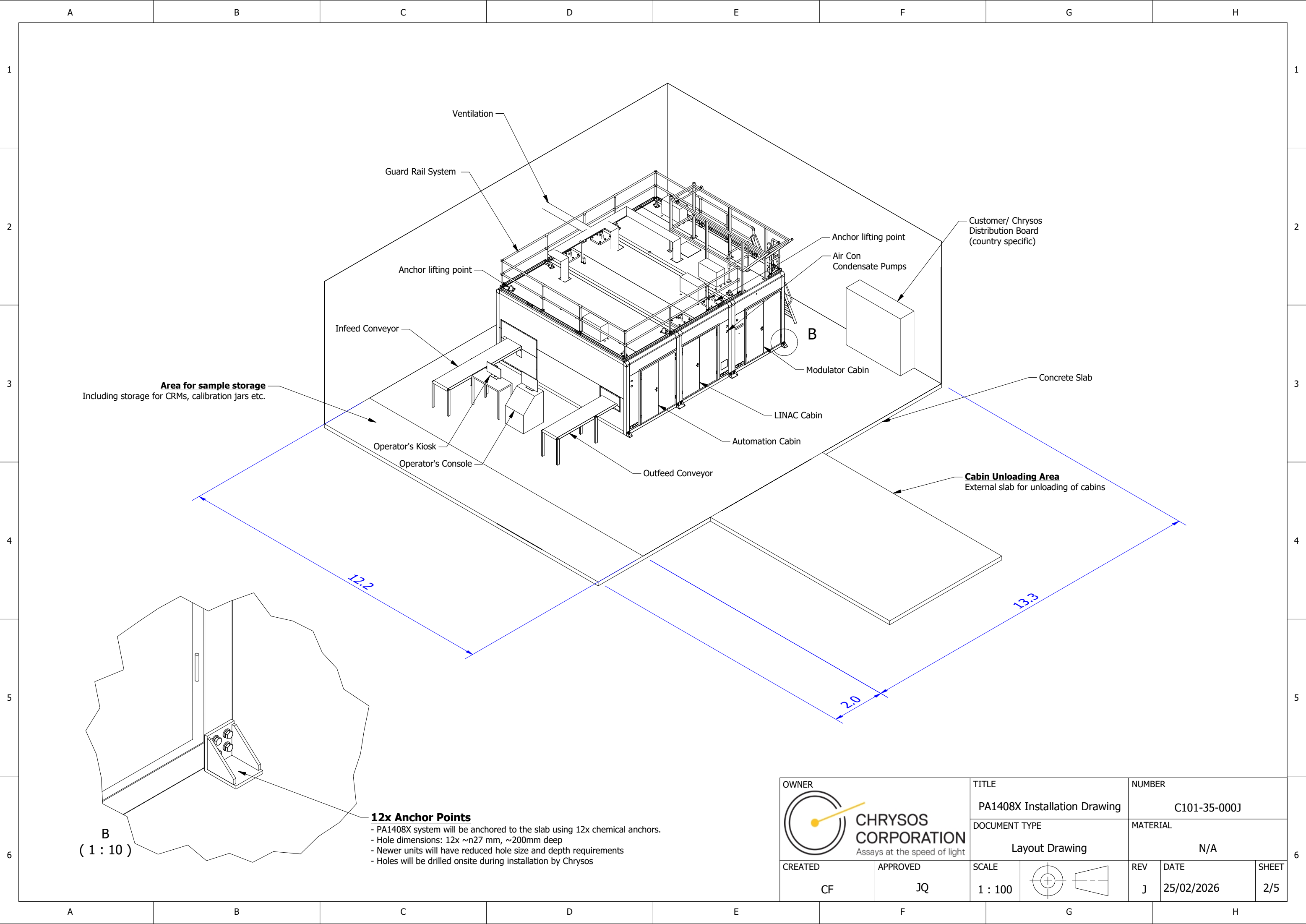
During maximum sample throughput, the air compressor must be able to supply 0.63 m3/min. The system pressure is regulated at around 0.8 MPa.

- Notes:**
- Ancillary equipment locations are indicative only
 - Exact locations are site specific
 - Contact Chrysos PM to confirm the latest drawing revision
 - Dimensions in meters (m)



A-A (1 : 125)

OWNER  CHRYSOS CORPORATION Assays at the speed of light		TITLE PA1408X Installation Drawing	NUMBER C101-35-000J		
		DOCUMENT TYPE Layout Drawing	MATERIAL N/A		
CREATED CF	APPROVED JQ	SCALE 1 : 125		REV J	DATE 25/02/2026
				SHEET 1/5	


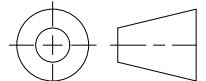


Area for sample storage
Including storage for CRMs, calibration jars etc.

Cabin Unloading Area
External slab for unloading of cabins

B
(1 : 10)

- 12x Anchor Points**
- PA1408X system will be anchored to the slab using 12x chemical anchors.
 - Hole dimensions: 12x ~n27 mm, ~200mm deep
 - Newer units will have reduced hole size and depth requirements
 - Holes will be drilled onsite during installation by Chrysos

OWNER		TITLE		NUMBER	
 CHRYSOS CORPORATION Assays at the speed of light		PA1408X Installation Drawing		C101-35-000J	
		DOCUMENT TYPE		MATERIAL	
CREATED		APPROVED		SCALE	
CF		JQ		1 : 100	
				REV	
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				DATE	
				25/02/2026	
				SHEET	
				2/5	

PhotonAssay 1408X System
System Mass, Cabin Positioning and Slab Specifications

Cabin weights - during transport:

Automation cabin = 13 tonne
 LINAC Cabin = 30 tonne
 Modulator Cabin = 10 tonne

Cabin weights - final position:

Automation cabin = 14 tonne
 LINAC Cabin = 52.3 tonne
 Modulator Cabin = 12 tonne

Cabin lifting eyes:

Each cabin has 4x lifting eyes for lifting the cabins. Each cabin can only be lifted by these lifting eyes. The lift must be completed by a certified "Rigger"

Cabin base support 'footpads':

See drawing details for cabin support footpad locations. The cabins must only be supported at these points during unloading. Chrysos will utilize 'shims' when placing the cabins into their final location. See shim details for info on contact point area.

Positioning the Cabins:

Four hydraulic jacks are used to raise and lower each cabin, each jack has a bottom surface area of 300x250mm, the maximum load on each jack is no greater than 100kN.

During transport each cabin is moved using 4no. 'trolleys' with 12no. polyurethane wheels each (Φ115x60mm), the maximum load on each trolley is again no greater than 100kN.

Note: Drilling holes into the slab during positioning:

When positioning the cabins it may be necessary to drill holes into the slab in order to create an anchor point for horizontal translation of the cabins. The quantity and location will vary depending on the site layout and other factors. In general these holes will be ~Ø27 mm and ~200mm deep. Holes will be drilled by Chrysos installation team.

Slab Specifications:

The following must be considered by a suitable professional.

- Geotechnical factors (soil stiffness, movement potential, long term settlement rate, etc).
- Concrete grade (note that varying the concrete grade may not be beneficial due to high level of punching shear stresses around the plate)
- Reinforcement ratios and distributions.
- Extent of Slab (i.e. slab edge conditions, etc).
- Other factor for concrete durability consideration (e.g. proximity to coastline, soil chemistry, etc).

The following shows an example of a slab that was deemed suitable for a previous project:

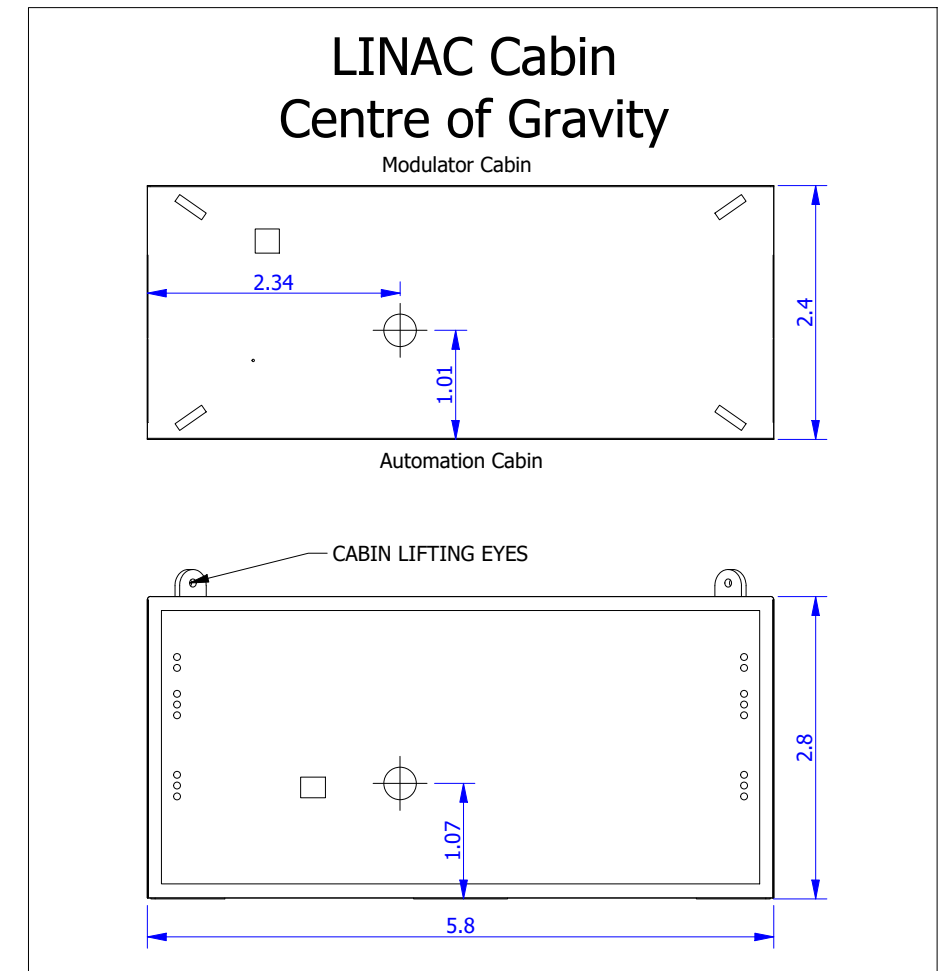
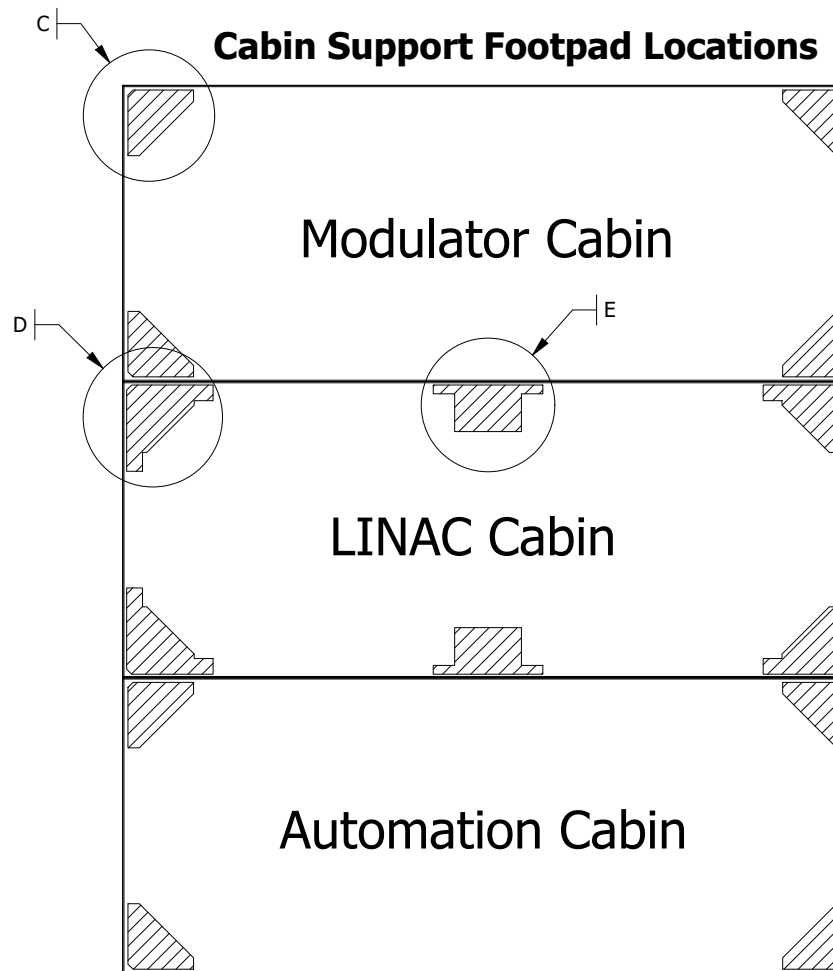
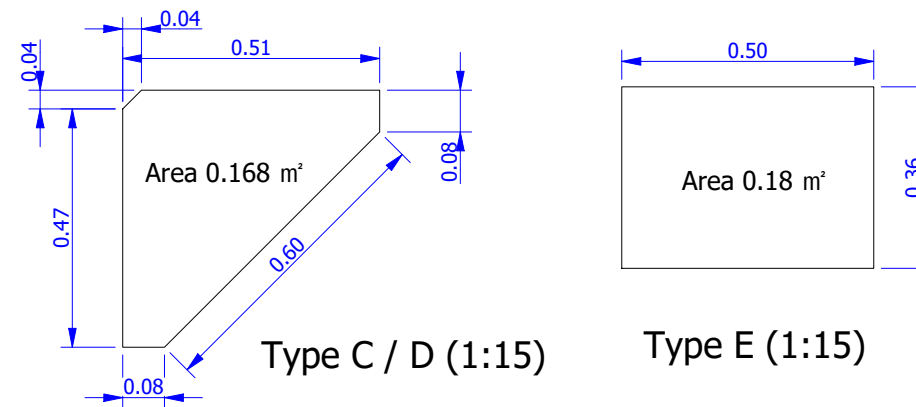
- 15 cm thick industrial slab, 40 MPa, F82 Mesh

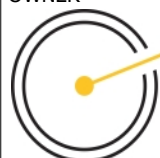
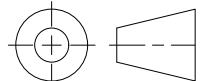
Other Slab Notes:

- The slab must be flat (without steps or slopes) from Cabin Unloading Area into the facility to allow cabins to be moved on "trolleys" - see Sheet 3

CABIN SHIMS

Chrysos utilises 2x types of shims for leveling the cabins on the slab, these shims are the contact point between the cabin and the slab. Each footpad will have shims placed underneath.



OWNER  CHRYSOS CORPORATION Assays at the speed of light		TITLE PA1408X Installation Drawing Centre of Gravity		NUMBER C101-35-000J	
CREATED CF		APPROVED JQ		DOCUMENT TYPE Layout Drawing	
SCALE 1 : 60				MATERIAL N/A	
		REV J		DATE 25/02/2026	
				SHEET 3/5	

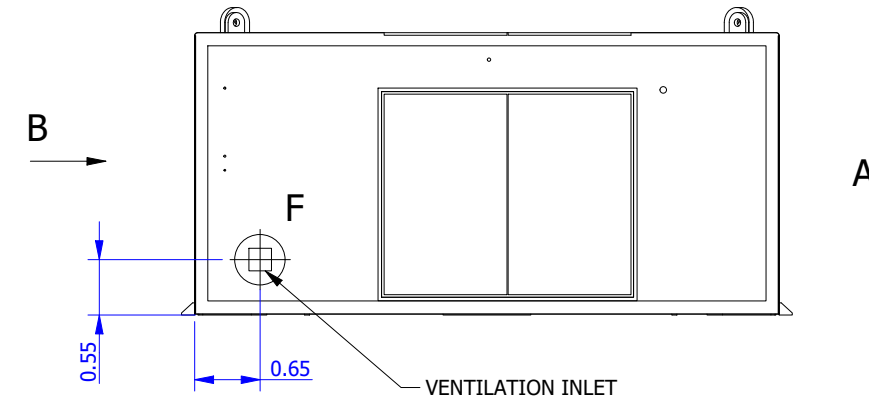
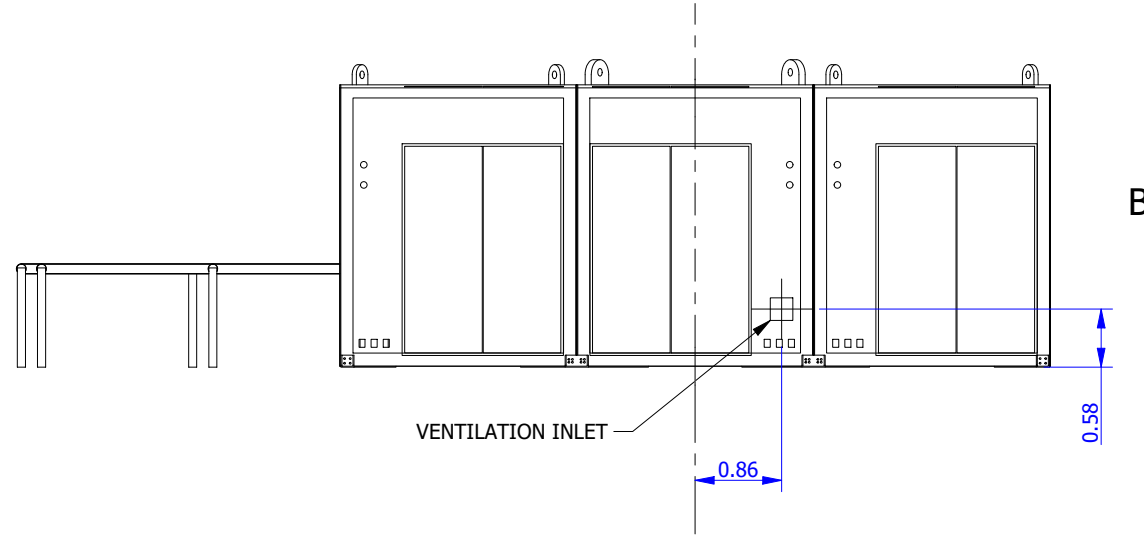
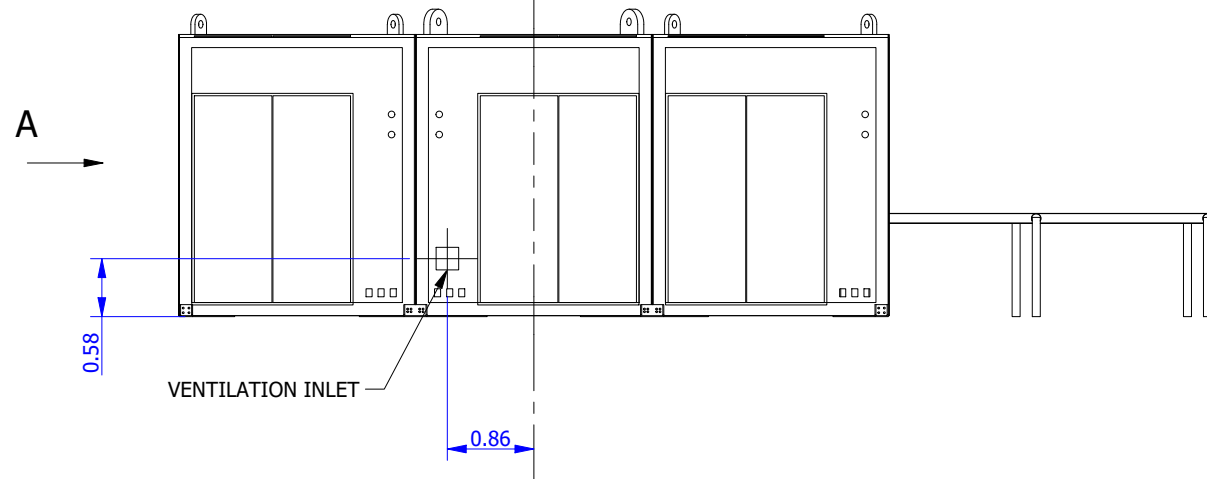
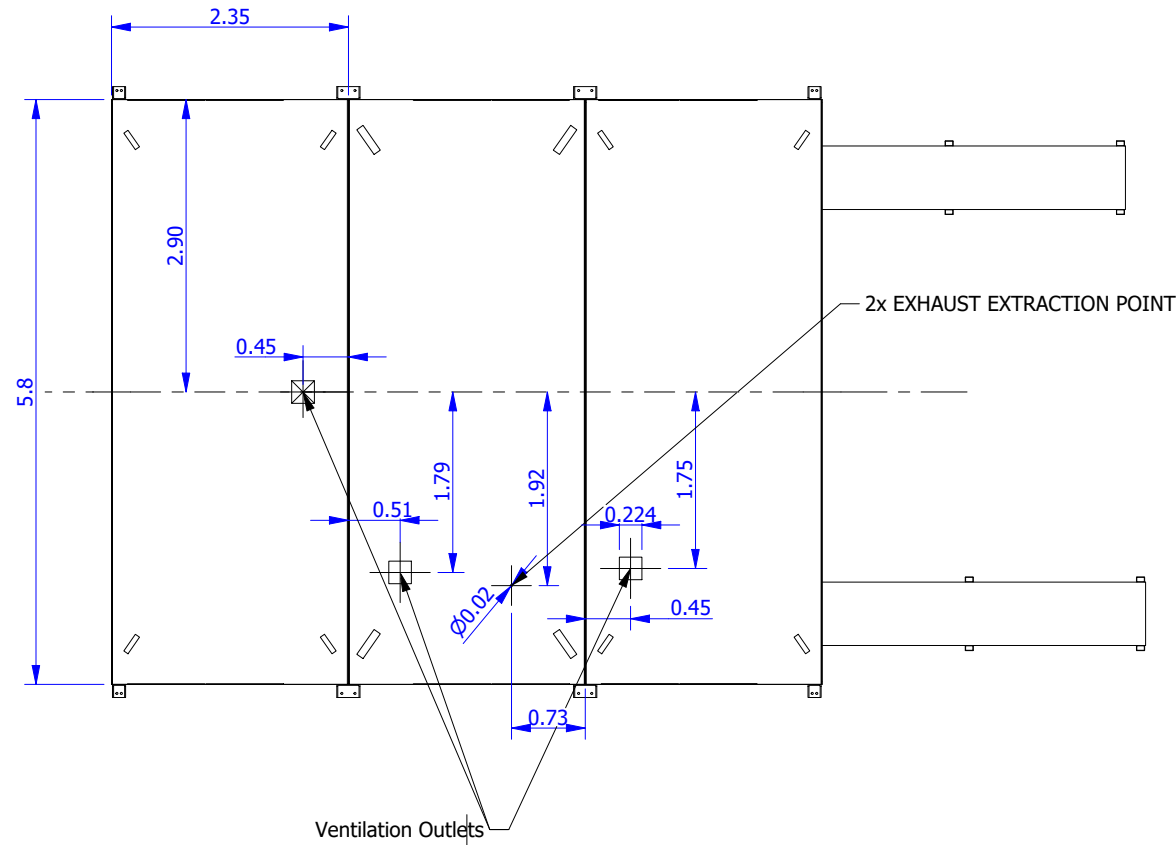
PhotonAssay 1408X System
Ventilation and Exhaust Points:

Ducting/ Ventilation

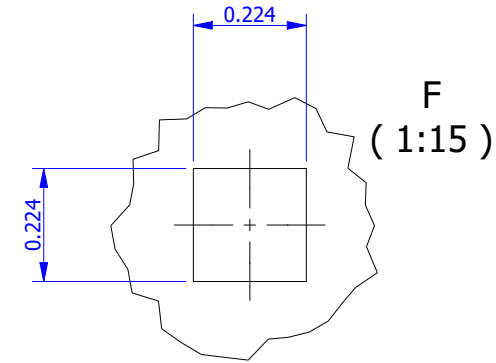
- Ducting and additional inline fans, if required, to be installed onsite by others.
- Typically a diameter of ~200mm circular ducting can be used however, exact diameter and length of ducting is site specific.

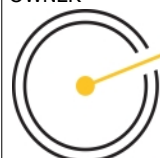
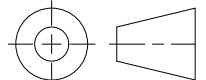
Exhaust Points

- Each cabin contains 1x exhaust fan (supplied by Chrysos) with an approximate air flow rate of 200m³/h per fan.
- Connection between exhaust fans and ventilation can be made using 3x spigot plates and adhesive (or similar).
- There are also 2x smaller apertures on top of the middle cabin (holes that are approximately 20 mm in diameter), these should also be routed into the ducting and ventilated out of the facility. The combined air flow from these apertures is <200m³/h.



TYPICAL DETAIL



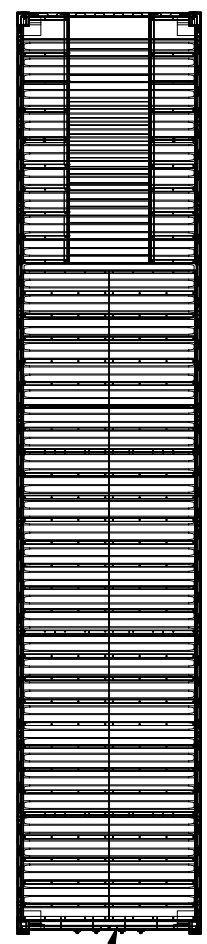
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DOCUMENT TYPE Layout Drawing		MATERIAL N/A			
CREATED CF	APPROVED JQ	SCALE 1 : 75		REV J	DATE 25/02/2026
				SHEET 4/5	

**PhotonAssay 1408X System
Spares Storage, Temporary Storage, and
Office Space Requirements**

- Spares storage area:**
- Approx. 20 m2 area required (site specific).
 - The Spares storage area requires 1x 15A 220-240V AC RCD Power outlet to keep detectors cool and charge UPS.
 - Spares storage temperature range: 0 - 40 °C
 - Ventilation not required.
 - Humidity range: <90%, non-condensing
- Note 1: if a separate area is not available, a fenced area that is secure and lockable and that meets the above conditions would be sufficient
 Note 2: Chrysos may require additional space for several larger crates/pallets depending on site location and layout.

- Temporary storage area:**
- It is necessary to designate a temporary store area for the loose cargo (wooden crates and pallets), to be used during installation only.
- Please consider 200 to 400 m2 for the outdoor storage area and 50 m2 for indoors.
- Refer to PRO-088 - PhotonAssay 1408X Transport Info.

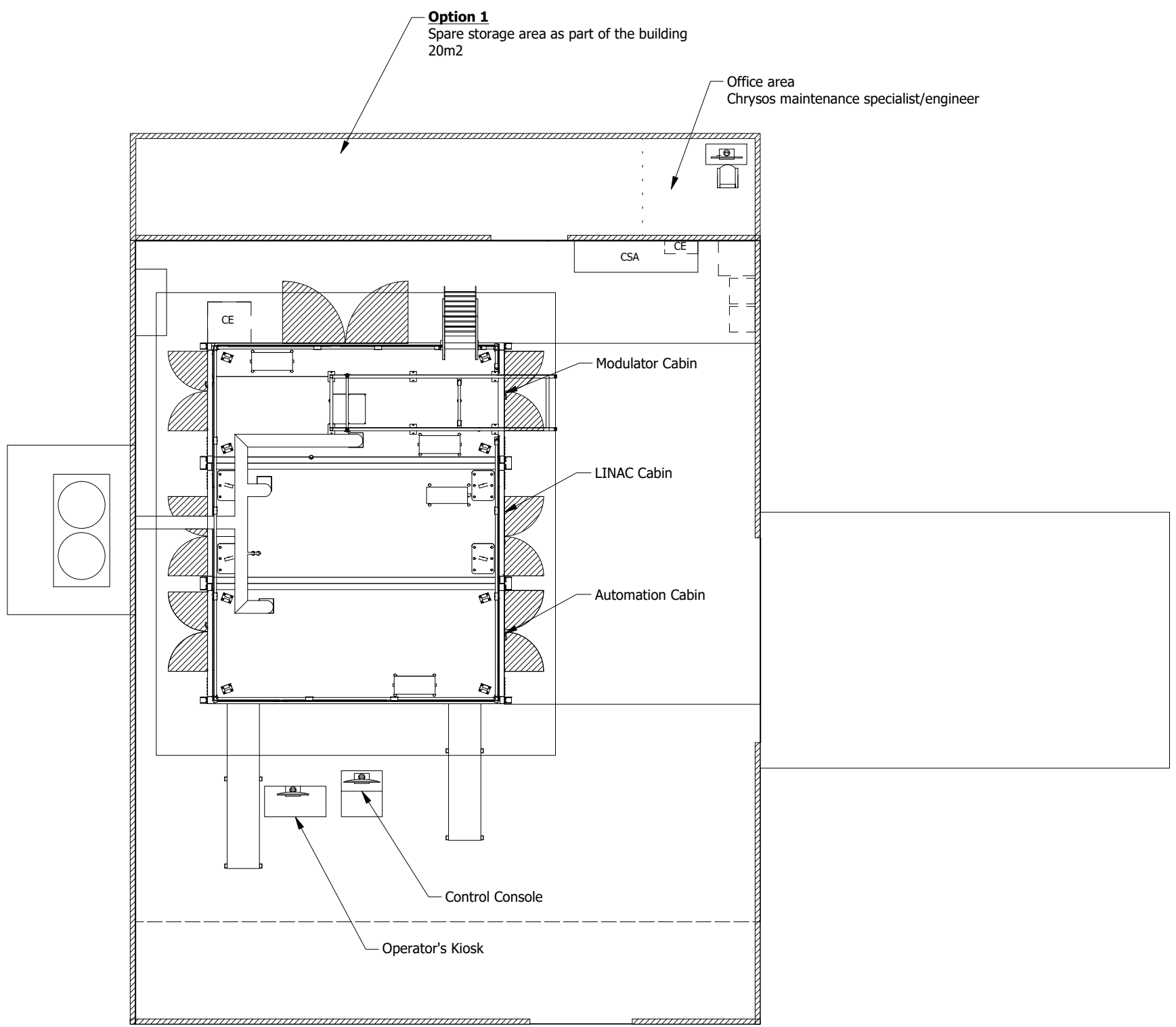
- Office space:**
- An office space for Chrysos maintenance personnel should be included close to the Photon Assay unit and the spare storage area (see ideal layout on this sheet).

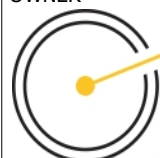
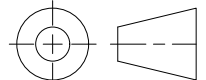


Option 2
Spare storage area
40 ft container

Option 1
Spare storage area as part of the building
20m2

Office area
Chrysos maintenance specialist/engineer



OWNER  CHRYSOS CORPORATION Assays at the speed of light		TITLE PA1408X Installation Drawing		NUMBER C101-35-000J		
CREATED CF		APPROVED JQ		DOCUMENT TYPE Layout Drawing		MATERIAL N/A
SCALE 1 : 100				REV J	DATE 25/02/2026	SHEET 5/5