



Title: Supply and Installation of Safety Barricading using
Aluminum Partition Grills with Stainless Steel Structure at
ITER India Gyrotron Test Facility

Tender Notice No.

I-I/ET-TPT/24006/24-25

Title	Tender No. I-I/ET-TPT/24006/24-25 dated 20-08-2024 for Supply and Installation of Safety Barricading using Aluminium Partition Grills with Stainless Steel Structure at ITER India Gyrotron Test Facility
Sub Title	PART-A (II): Scope of Supply, Scope of Work and Technical Specifications

ITER-India, Institute for Plasma Research
Block A, Sangath Skyz, Bhat-Motera Road, Koteswar,
Ahmedabad 380005, Gujarat, India





1. Introduction:

At the ITER-India Gyrotron Test Facility (IIGTF), it is essential to implement a safety barricade system for access control surrounding the high-power RF test stand. This measure is crucial to safeguard individuals from hazards associated with high voltage, X-ray radiation, and magnetic fields.

2. Scope of work:

Safety barricading work to be carried at 3rd floor ITER-India Laboratory building, IPR Campus. Detailed scope is summarised below.

- a) Study of schematic and drawings as per attached Annexure-II
- b) Sample clearance for the materials/ items is to be done prior to bulk procurement.
- c) Procurement of the material as per BOQ.
- d) It is preferred that all prefabricated module frames fitted with aluminium grills and all SS 304 support structures welded with a drilled base plate for grouting work be supplied at site for fast installation and erecting work, consequently reducing the work hour in the lab due to the limited available work space.
- e) **Transportation of material, including loading and unloading, to the installation site, i.e., the 3rd floor, ECRH Lab, and ITER-India building, is within the supplier's scope.**
- f) Obtain the work permit from ITER-India, before start of execution of work.
- g) Erection of the prefabricated module and support structure as per the attached annexure's schematic and drawings.
- h) The following points are to be kept in mind:
 - 1) Cleaning of the site on a regular basis at the end of the day as per the satisfaction of the engineer-in-charge or authorized personnel.
 - 2) The surface or ground to be used for erecting the mounting support structure for grill installation is made up of concrete.
 - 3) Grouting task is to be done on site is under supplier's scope.
 - 4) Working hours available generally at the site will be 9:30 a.m. to 17:30 p.m. from Monday to Friday, excluding any government-declared holiday.
- i) Please refer to https://www.ipr.res.in/documents/safety_protocols.html for safety protocols safety reporting forms applicable during site work.

3. Instructions to Bidder:

1. Before bid submission, **the bidder shall inspect the site of work and shall fully acquaint himself about the conditions prevailing at site, availability of facilities, availability of vacant space and suitable location for store and transport access**, the extent of stairs and crane involved in the work (over the entire duration of contract) including local conditions, as required for satisfactory execution of the work and nothing extra whatsoever shall be paid on this account.
2. **A site visit certificate will be issued to the bidders for visiting the work-place area and same would be submitted along with the bid else bid may be considered disqualified.**
3. It shall be deemed that the bidder shall have satisfied himself as to the nature and location of the work, transport access, availability of space for material storage etc. The ITER-India will bear no responsibility for lack of such knowledge and the consequences thereof.



4. The Successful bidder shall be responsible for the true and proper setting out of the work in coordination with the Engineer-in-charge or his authorized representatives and for the correctness of the positions, levels, dimensions and alignments of all parts of the structure and for the provisions of all necessary instruments' appliances and labour in connection therewith.
5. If at any time, during the progress of work, any error appears or arises in the position, levels, dimensions or alignment of any part of the work, the contractor on being asked to do so by the Engineer-in-charge, shall rectify such error to the entire satisfaction of Engineer-in-charge. The checking by the Engineer-in-charge or his authorized representative shall not relieve the contractor of his responsibility for the correctness of any setting out of any line or level.
6. The Successful bidder shall at his own cost submit samples of all materials sufficiently in advance and obtain approval of the Engineer-in-charge. Subsequently, the materials to be used in the actual execution of the work shall strictly conform to the quality of samples approved by the Engineer- in-charge and nothing extra shall be paid on this account. The acceptance of any sample or material on inspection shall not be a bar to its subsequent rejection, if found defective.
7. Facilities available at site for use: Overhead crane (Capacity: 05 ton) and Power points for use of electrical power. Details shall be checked by the bidder at the time of site visit.

3.1 Precautions to be followed during the site work

1. The contractor is required to take necessary measures to ensure the safety of personnel & equipment. The contractor is fully responsible for the safety of the man, materials & machinery while executing the site work. Please refer to the link https://www.ipr.res.in/documents/safety_protocols.html for safety protocols and reporting forms applicable for IPR/ITER-India lab site.
2. Work should be done only in the presence of ITER-India representative(s).
3. Scratches, dents and tool marks are not allowed on the surfaces, Panels & other equipment in site.
4. The work shall be carried out in such a manner so as not to adversely interfere/or effect or disturb other works being executed in adjacent labs, if any.
5. Any loss/ damages done by the contractor to any existing work or facility at ITER-India Lab building being executed by other agencies shall be made good by him at his own cost and risk.
6. Some restrictions may be imposed by the Institutes security staff etc., on the working and for movement of labour, materials etc. The contractor shall be bound to follow all such restrictions/instructions and nothing extra shall be payable on this account.

3.4 Work Location

ECRH Lab is situated on 3rd floor, ~ **14 m** from ground at ITER-India Lab Building, Institute for Plasma Research. All the work will be executed at the division mentioned below only.

ECRH Lab,
ITER-India Lab Building,
Institute for Plasma Research Campus,
Bhat Village, Near Indira Bridge



Gandhinagar-382428, Gujarat – INDIA.

4. Bill of Quantity for Safety Barricading Work

S. No	Description	Qty.	Unit
1	Barricading & Structure Work		
1.1	Aluminium barricading Panels a) Aluminium Grill <ul style="list-style-type: none">Providing following items ~ 10 mm thick aluminium grills, with weight/area > 2.5 Kg/m² fixed in the proper aluminium frame for Safety Barricading work.Size of the aluminium frame should be 1.83 m. (H) x 1.22 m. (W) in dimensionRate to include cutting and fitting of grill with specified dimension with frame material, grooves and finishing the same all complete to the satisfactory level of Engineer-in-Charge (ITER-India representative) at site. b) Aluminium frame profile section <ul style="list-style-type: none">Aluminium grills are to be properly framed in aluminium frame profile with 16-gauge thickness (≥ 1.5 mm) and weight ≥ 0.875 Kg/m from all sides using glazing clip/Cap as shown in annexure II.3 and II.4 schematic.All the framed aluminium grills must be fitted with good quality screw type mounting hinges for integrating with support structure and providing rigidity to the partitioned work through screw tightening.Glazing caps/ clips and other fittings to procured w.r.t aluminium frame profile.	~ 56	m²
1.2	Support Structure <ul style="list-style-type: none">Support structure using C channel (75mm x 40mm, web - 5mm, flange - 7mm) profile section using SS 304 with minimum dimension 1.83 m. (H) to be prepared and grouted at every ~ 1.22 m for mounting the aluminium frames from both side for providing strength to the partitioned frames.Grouting Plate: 7 mm thick SS 304 plate welded with C channelGrouting bolts and nuts: SS 304 Material (as required on site)	24	Nos
2	Doors/Gates: Providing & Fixing double swing type aluminium grill framed door approx. 1.83 m. (H) x 1 meter (W) made out of ~ 8 mm thick aluminium grill. Fittings: fixed with stainless steel patch fittings at top & bottom, floor springs and Stainless-Steel Mortise Door Handle Set with Lock Body as per recommended make listed below. The door shall have handle lock and stainless-steel brush finish door handle of approx. ~ 25 mm diameter as per standard make as per the direction of Engineer-In-Charge. All as per finalized drawing. (Recommended make: Ozone/ Enox)		



2.1	Access Gates: <ul style="list-style-type: none">• Double swing type doors are to be manufactured using Al alloy grill with one side frame having size 1.83 m. (H) x 1 meter (W); free end should be fitted with PVC or rubber coated roller support and grounded for avoiding any future tilt & smooth operation of the gates. The gate should be fitted with hinges, locks, handles and other accessories as per approved design and pattern as per the direction of Engineer-in-charge	2	Sets
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Note: All the items/equipment and components/accessories required in the work-scope should be of brand new & of reputed makes.



5. Annexure

Please note that this certificate along with necessary documents (Photo ID proof) need to be submitted at least 2 working days before date of work permit.

Annexure-I: Site visit Certificate

Date:

Enquiry / Bid No.	
Date	
Item Description	
Due Date for Bid submission	

This is to confirm that

Mr.

of Messrs.

has / have visited the site at ITER-India Lab, Institute for Plasma Research on

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to understand the scope of supply, work, technical specifications and get acquainted with work site of the tender requirements related to above mentioned enquiry / tender.

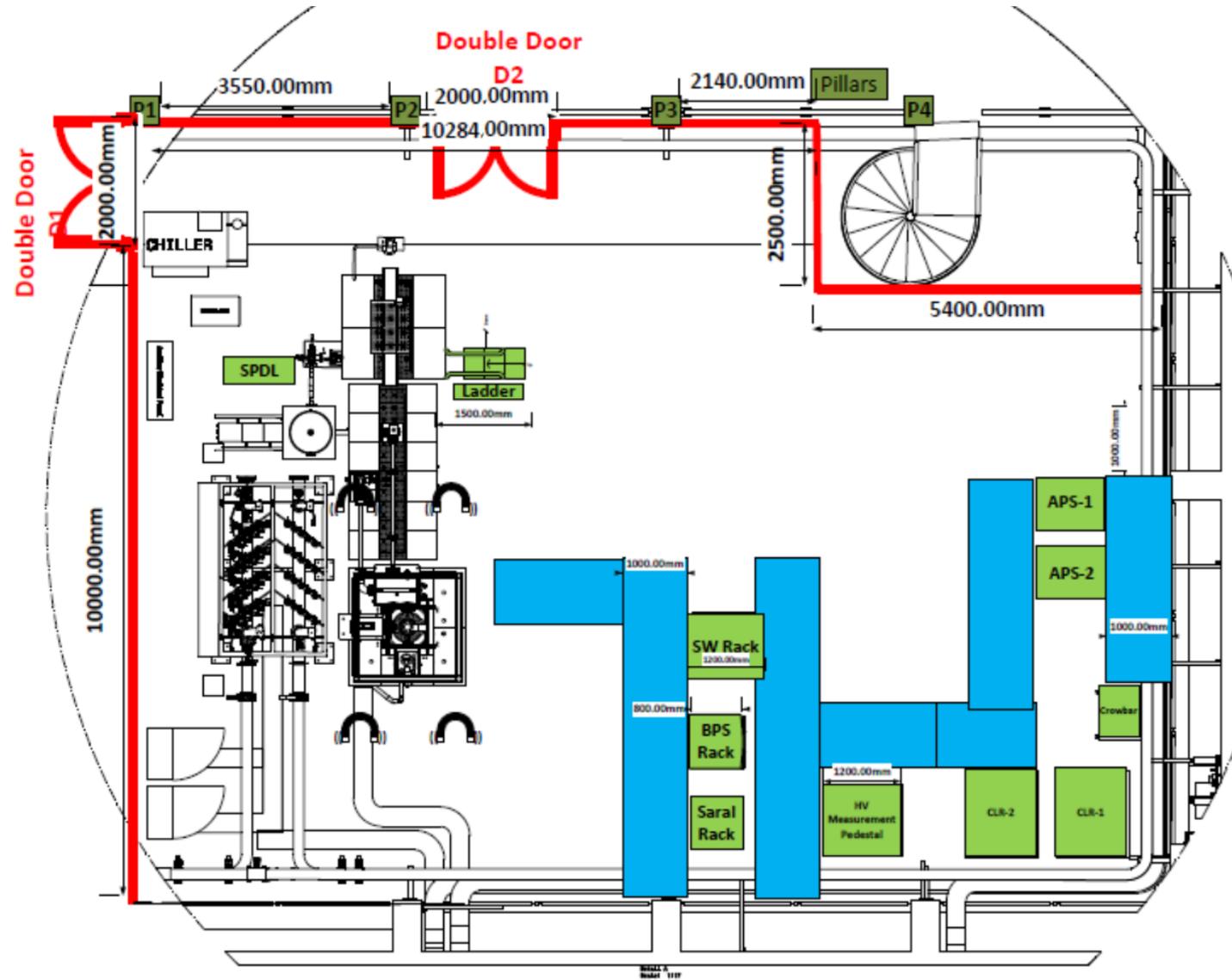
Bidder's
Signature:
Date:

Coordinator, ITER-India, IPR

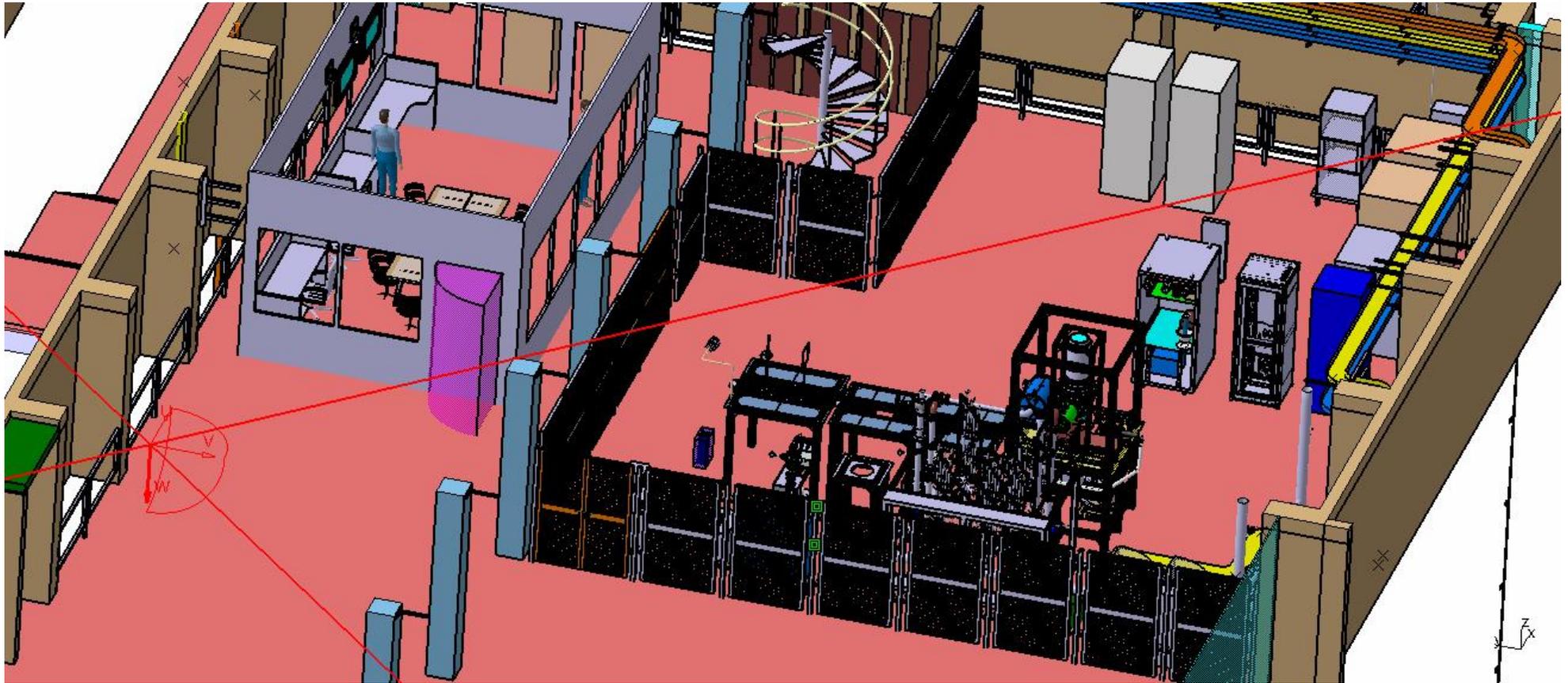
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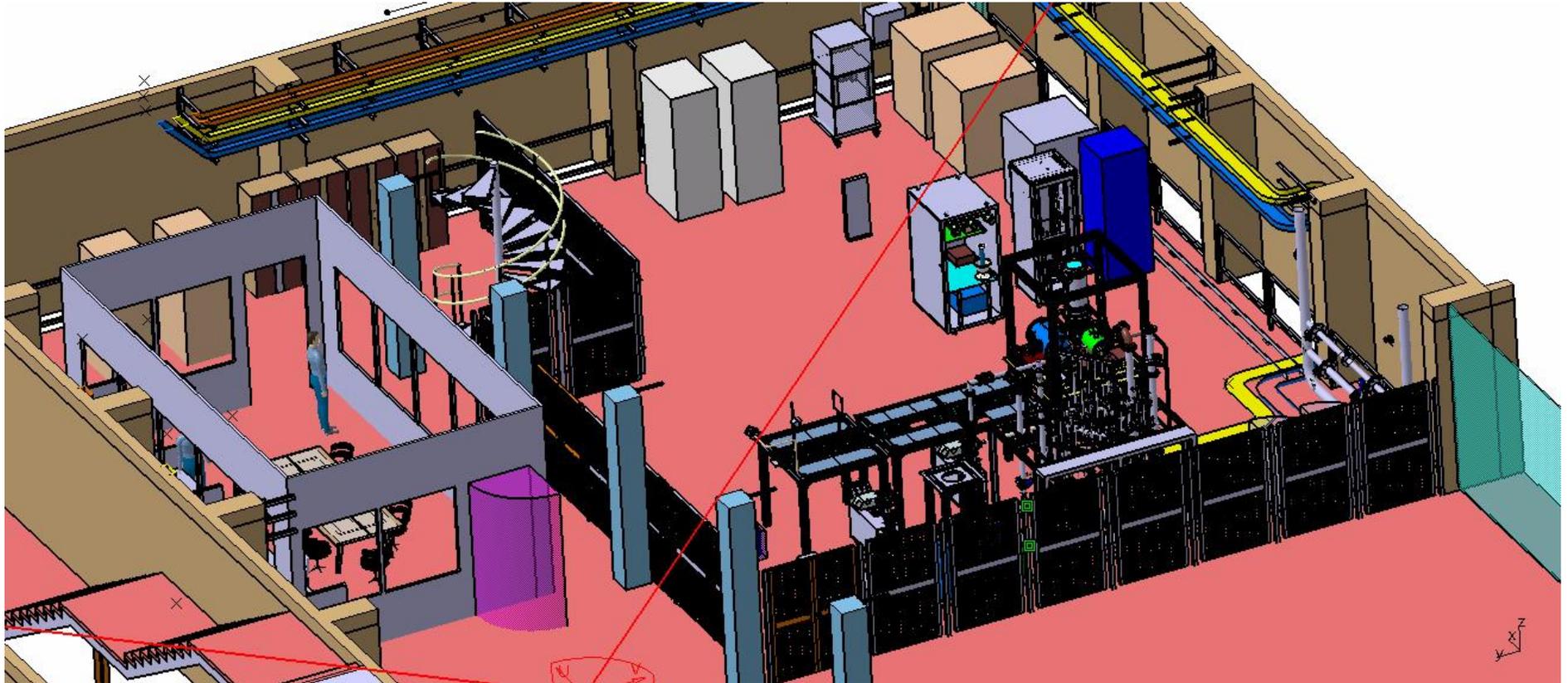
Annexure-II

1. Floor view with dimensions

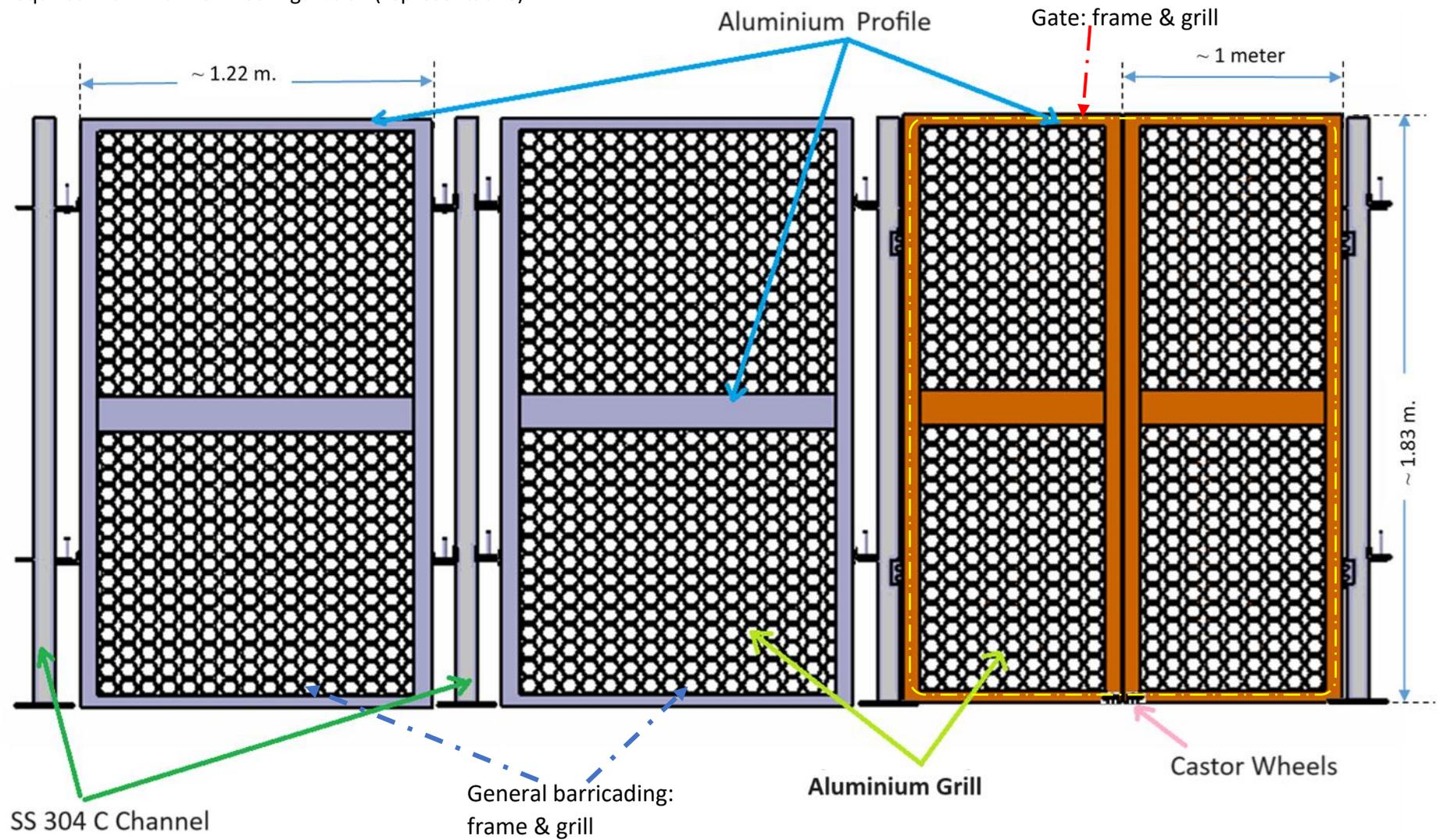


2. CAD Model 3D view

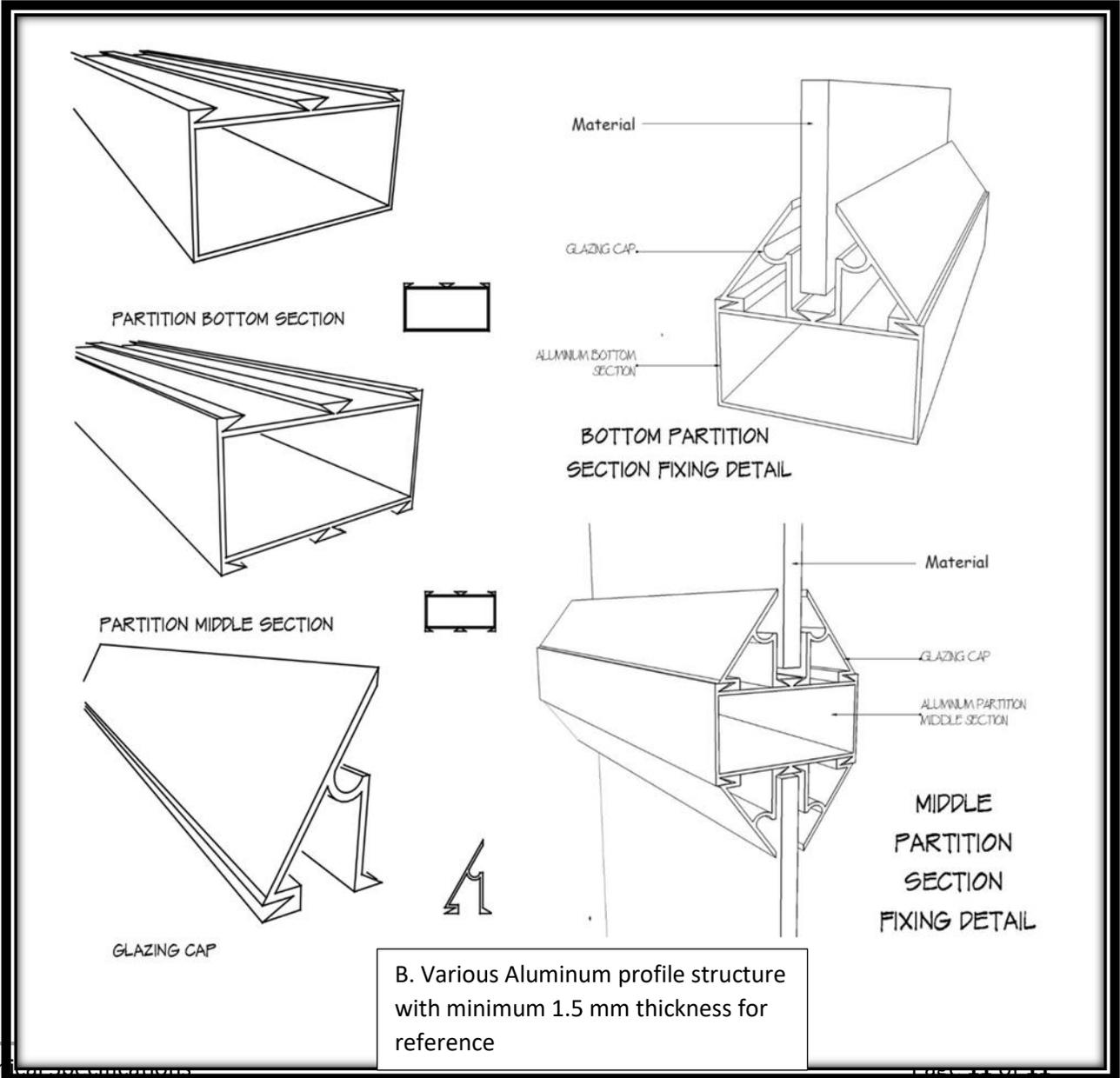
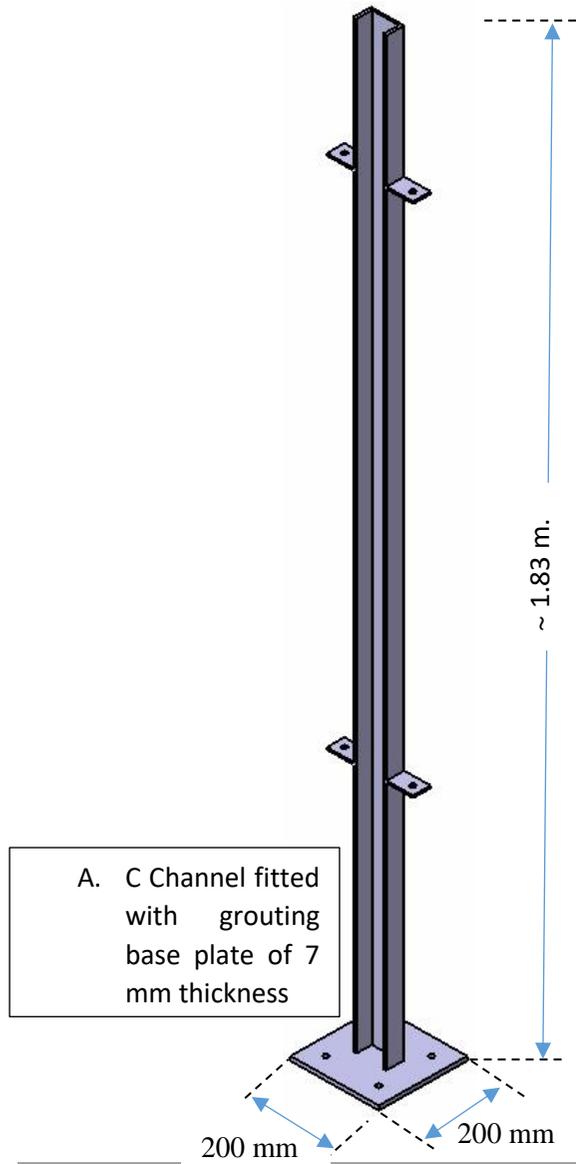




3. Required Aluminium Grill Configuration (representative)



4. Schematic & dimensions



B. Various Aluminum profile structure with minimum 1.5 mm thickness for reference