


**Draft QRs/ TDs OF ARTIFICIAL CLIMBING WALL -Revision**  
**Technical Specification (4 Face Wall)**


Sl. No.	Specification	As per Old QRs	Proposed QRs	Procedure suggested for Trial for B.O.O	Result expected
	General:-	<p>All parameters/ specifications mentioned in QRs will be checked by the Board of Officers by ascertaining/verifying following checks in the presence of Vender/Supplier/Manufacturer. In case of any discrepancies/problem, the vender/rep of firm will demonstrate the features to the Board of Officers of the force concerned. Further, if proper testing instrument for testing these parameters is not available with user, same will be arranged by the vender.</p> <p>i) <b>Physical Checks</b> :- In this category, specification of the equipment will be checked physically as per QR.</p> <p>ii) <b>Functional Checks:</b> - The vender will show all the features/ configuration of the equipment functioning on ground to the Board of Officers during trial.</p> <p>iii) <b>Submission of certificates:</b> - Specification which cannot be checked due to lack of testing facilities/expertise, self-certificate of OEM has to be provided by the vender/bidder during trial.</p>	Same as in Old QRs	As per Old QRs.	There is no changes in the system

S/ No	Specification	As per old Qualitative Requirement (QR)	Trial Directives	Proposed QRs.	Justification	Procedure suggested for Trial	Result expected
	<b>FACE-1 (Tactical Climbing Wall)</b>						
1.	Vertical height of wall	15.0 Meter	The Board will carry out physical check as well as functional test of height of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	18 Meter (60 feet)	For battle obstacle assault training etc	The Board will carry out physical check as well as functional test of height of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	As per requirement mentioned in the proposed QRs.

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2.	Width of faces	6.0 Meter	The Board will carry out physical check as well as functional test of width of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
3.	Number of face of wall	Face 6.0 Meter wide with Lead Climbing Panels	The Board will carry out physical check as well as functional test of face of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
4.	Total climbing surface	Single face 100 Sq. meter Including side cover Panels	The Board will carry out physical check as well as functional test of climbing surface. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	Single face 120 Sq. meter including side cover panels	According to the height	As per Old QRs	As per requirement mentioned in the proposed QRs.
5.	Usage	Multipurpose training (beginners, as well as intermediate/advance level climbers)	The Board will carry out physical check as well as functional test of usage of mentioned parameters. Also the Board of Officer will check the OEM compliance Certificate submitted by the vender. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
6.	Number of climbers	At least 3 climbers simultaneously per face	The Board will carry out physical check as well as functional test of climbing surface. Also the Board of Officer will check the OEM compliance Certificate submitted by the vender. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-


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7.	Support Structure	Self-Standing M.S. Structure as per IS:800	The Board will carry out physical check as well as functional test of support structure. Also the Board of Officer will check the OEM compliance Certificate submitted by the vender for IS: 800 Certificate.	There is no change.	-	-	-
8.	Surface	Climbing surface of wall EN:12572-2017 certified 3D and 2D polyester resin panel having SAND FINISH on outer face minimum 10mm thick on flanges and 6mm in the centre thickness with provision of fixing external movable holds @ min.4 Nos./Sq.Mtr meant for outdoor use to take loading and reaction force as per Climbing Standard.	The Board will carry out physical check as well as functional test of the provided specification and also check the EN certificate of the panels provided by the vender. Further, in case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
9.	Safety Top Rope Anchor	4 Nos. Fixed Top per face. Anchors security system EN:12572-2017 Certified	The Board will carry out physical check as well as functional test of mentioned parameters. Also the Board of Officer will check the OEM Certificate Submitted by the vender for EN:12572-2017 certification.	There is no change.	-	-	-
10.	TUV/UIAA/UL Certified Holds with certificatory	250 TUV/UIAA/UL Certified Holds Nos	The Board will carry out physical check as well as functional test of mentioned parameters. Also the Board of Officers will check the OEM compliance Certificate submitted by the vender for TUV/UIAA/UL certification.	There is no change.	-	-	-

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11.	Bolts and Nuts	Hot dip galvanized or Zinc plated TUV/UIAA/UL Certified	The Board will carry out physical check as well as functional test of mentioned specification. Also check the OEM certification provided by the vender for material used in Bolts & Nuts.	There is no change.	-	-	-
12.	Lead protection/ anchors loading	Individual Protection Point (IPP) to take loading as per EN 12572-2017.	The Board will carry out physical check as well as functional test of mentioned parameters. Also the Board of Officer will check the OEM Certificate submitted by the vender for EN: 12572-2017 certification.	There is no change.	-	-	-
13.	Foundation	2.0 Meter depth RCC as per IS 456 :2000. May vary as per soil condition /site condition.	The Board of Officer will check the OEM Certificate submitted by the vender for RCC construction and IS 456:2000 Certificate for certifying prescribed construction norms.	There is no change.	-	-	-
<b>FACE-2 (IFSC Standard Speed Climbing Wall)</b>							
1.	Vertical height of wall face wise specifications	15 meter	The Board will carry out physical check as well as functional test of height of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	<b>15.7 Meter</b>	-	The Board will carry out physical check as well as functional test of height of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	As per requirement mentioned in the proposed QRs.
2.	Width of faces	6 meters	The Board will carry out physical check as well as functional test of width of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
3.	Number of face of wall	1 Face 6.0 meter wide	The Board will carry out physical check as well as functional test of face of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-

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4.	Total Climbing surface	93.0 Sq. meter	The Board will carry out physical check as well as functional test of climbing surface. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
5.	Usage	Multipurpose training (beginners, as well as intermediate/advance level climbers.	The Board will carry out physical check as well as functional test of usage of mentioned parameters. Also the Board of Officer will check the OEM compliance Certificate submitted by the vender. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
6.	Number of climbers	2 Climbers simultaneously.	The Board will carry out physical check as well as functional test of climbing surface. Also the Board of Officer will check the OEM compliance Certificate submitted by the vender. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
7.	Support Structure	Self-Standing M.S. Structure as per IS:800	The Board will carry out physical check as well as functional test of support structure. Also the Board of Officers will check the OEM compliance Certificate submitted by the vender for IS: 800 certificate.	There is no change.	-	-	-


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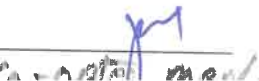
  
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8.	Surface	Climbing surface of wall EN: 12572-2017 certified 2D FRP (fiber reinforced plastic) panels with top and bottom layer of chopped and woven roving fiber glass and resin and a polyvinyl chloride core and shape with minimum 18mm thickness. Panels shall have provision of insert holes @ minimum 110 no's per panels for fixing holds The panels should be able to withstand climbers weight, weather proof for outdoor use and meet norms as per EN12572:2017 STANDARDS.	The Board will carry out physical check as well as functional test of the provided specification and also check the EN: 12572-2017 certification provided by the vender. Further, in case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
9.	Safety Top Rope Anchor	2 No.s Fixed Top Anchors security system EN: 12572-2017 Certified	The Board will carry out physical check as Well as functional test of mentioned parameters. Also the Board of Officer will check the OEM Certificate submitted by the vender for EN:12572-2017 certification.	There is no change.	-	-	-
10.	Speed Holds	IFSC certified speed Climbing Holds 40 Nos. Hand Holds 22 Nos. Foot Holds TUV/UIAA/UL Certified	The Board will carry out physical check as well as functional test of mentioned parameters. Also the Board of Officer will check the OEM compliance Certificate submitted by the vender for TUV/UIAA/UL certification.	There is no change.	-	-	-

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11.	Bolts and Nuts	Hot dip galvanized or Zinc plated TUV/UIAA/UL Certified	The Board will carry out physical check as well as functional test of mentioned specification. Also check the OEM certification provided by the vender for material used in Bolts & Nuts.	There is no change.	-	-	-
12.	Lead protection/ anchors loading	Individual Protection Point (IPP) to take loading as per EN 12572-2017	The Board will carry out physical check as well as functional test of mentioned parameter. Also the Board of Officer will check the OEM Certificate submitted by the vender for EN:12572-2017 certification.	There is no change.	-	-	-
13.	Foundation	2.0 Meter depth RCC as per IS 456 :2000. May vary as per soil condition /site condition.	The Board of Officer will check the OEM Certificate submitted by the vender for RCC construction and IS 456:2000 Certificate for certifying prescribed construction norms.	There is no change.	-	-	-
<b>FACE-3 (Rappelling Climbing Wall)</b>							
1.	Vertical height of wall face wise specifications	15 meter	The Board will carry out physical check as well as functional test of height of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	18 Meter (60 feet)	For battle obstacle assault training etc.	As per old QRs/TDs.	As per requirement mentioned in the proposed QRs.
2.	Width of faces	3 meters	The Board will carry out physical check as well as functional test of width of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
3.	Number of face of wall	1 Face 3.0 meter wide	The Board will carry out physical check as well as functional test of face of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-

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4.	Total Climbing surface	50.0 Sq. meter including side cover panels	The Board will carry out physical check as well as functional test of climbing surface. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	<b>60.0 meter including side cover Panels</b> Sq.	According to the height	As per old QRs/TDs.	As per requirement mentioned in the proposed QRs.
5.	Usage	Multipurpose training (beginners, as well as intermediate/advance level climbers_	The Board will carry out physical check as well as functional test of usage of mentioned parameters. Also the Board of Officer will check the OEM compliance Certificate submitted by the vender. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
6.	Number of climbers	1 Climbers	The Board will carry out physical check as well as functional test of climbing surface. Also the Board of Officer will check the OEM compliance Certificate submitted by the vender. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
7.	Support Structure	Self-Standing M.S. Structure as per IS:800	The Board will carry out physical check as well as functional test of support structure. Also the Board of Officers will check the OEM compliance Certificate submitted by the vender for IS: 800 certificate	There is no change.	-	-	-

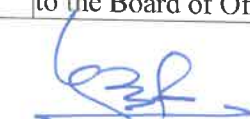



8.	Surface	Climbing surface of wall EN:12572-2017 certified 3D and 2D polyester resin panel having SAND FINISH on outer face minimum 10mm thick on flanges and 6mm in the centre thickness with provision of fixing external movable holds @ min.4 Nos./Sq.Mtr meant for outdoor use to take loading and reaction force as per Climbing Standard.	The Board will carry out physical check as well as functional test of the provided specification and also check the EN: 12572-2017 certification provided by the vender. Further, in case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
9.	Safety Top Rope Anchor	1 No.s Fixed Top Anchors security system EN: 12572-2017 Certified	The Board will carry out physical check as Well as functional test of mentioned parameters. Also the Board of Officer will check the OEM Certificate submitted by the vender for EN:12572-2017 certification.	There is no change.	-	-	-
10.	Bolts and Nuts	Hot dip galvanized or Zinc plated TUV/UIAA/UL Certified	The Board will carry out physical check as well as functional test of mentioned specification. Also check the OEM certification provided by the vender for material used in Bolts & Nuts.	There is no change.	-	-	-
11.	Lead protection/ anchors loading	Individual Protection Point (IPP) to take loading as per EN 12572-2017	The Board will carry out physical check as well as functional test of mentioned parameter. Also the Board of Officer will check the OEM Certificate submitted by the vender for EN:12572-2017 certification.	There is no change.	-	-	-

FACE-4 (Lead Climbing Wall)							
1.	Vertical height of wall	15.0 Meter	The Board will carry out physical check as well as functional test of height of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	18 Meter (60 feet)	For battle obstacle assault training etc.	The Board will carry out physical check as well as functional test of height of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	As per requirement mentioned in the proposed QRs.
2.	Width of faces	3.0 Meter	The Board will carry out physical check as well as functional test of width of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
3.	Number of face of wall	Face 3.0 Meter wide with Lead Climbing Panels	The Board will carry out physical check as well as functional test of face of wall. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
4.	Total climbing surface	Single face 50 Sq. meter Including side cover Panels	The Board will carry out physical check as well as functional test of climbing surface. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	60.0 meter including side cover Panels Sq.	According to the height	As per old QRs/TDs.	As per requirement mentioned in the proposed QRs.

  
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5.	Usage	Multipurpose training (beginners, as well as intermediate/advance level climbers)	The Board will carry out physical check as well as functional test of usage of mentioned parameters. Also the Board of Officer will check the OEM compliance Certificate submitted by the vender. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
6.	Number of climbers Support	At 1 climber simultaneously per face	The Board will carry out physical check as well as functional test of climbing surface. Also the Board of Officer will check the OEM compliance Certificate submitted by the vender. In case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
7.	Structure	Self-Standing M.S. Structure as per IS:800	The Board will carry out physical check as well as functional test of support structure. Also the Board of Officer will check the OEM compliance Certificate submitted by the vender for IS: 800 Certificate.	There is no change.	-	-	-

  
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8.	Surface	Climbing surface of wall EN:12572-2017 certified 2D polyester resin panel having SAND FINISH on outer face minimum 10mm thick on flanges and 6mm in the centre thickness with provision of fixing external movable holds @ min.4 Nos./Sq.Mtr meant for outdoor use to take loading and reaction force as per Climbing Standard.	The Board will carry out physical check as well as functional test of the provided specification and also check the EN certificate of the panels provided by the vender. Further, in case of any discrepancy, the vender/rep of firm will demonstrate the features to the Board of Officers.	There is no change.	-	-	-
9.	Safety Top Rope Anchor	2 Nos. Fixed Top per face. Anchors security system EN:12572-2017 Certified	The Board will carry out physical check as well as functional test of mentioned parameters. Also the Board of Officer will check the OEM Certificate Submitted by the vender for EN:12752-2017 certification.	There is no change.	-	-	-
10.	TUV/UIAA/UL Certified Holds with certificatory	125 Nos TUV/UIAA/UL Certified Holds	The Board will carry out physical check as well as functional test of mentioned parameters. Also the Board of Officers will check the OEM compliance Certificate submitted by the vender for TUV/UIAA/UL certification.	There is no change.	-	-	-

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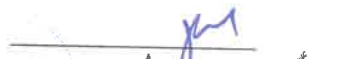
  
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11.	Bolts and Nuts	Hot dip galvanized or Zinc plated . TUV/UIAA/UL Certified	The Board will carry out physical check as well as functional test of mentioned specification. Also check the OEM certification provided by the vender for material used in Bolts & Nuts.	There is no change.	-	-	-
12.	Lead protection/ anchors loading	Individual Protection Point (IPP) to take loading as per EN 12572-2017.	The Board will carry out physical check as well as functional test of mentioned parameters. Also the Board of Officer will check the OEM Certificate submitted by the vender for EN: 12572-2017 certification.	There is no change.	-	-	-
13	Foundation	2.0 Meter depth RCC as per IS 456 :2000. May vary as per soil condition /site condition.	The Board of Officer will check the OEM Certificate submitted by the vender for RCC construction and IS 456:2000 Certificate for certifying prescribed construction norms.	There is no change.	-	-	-

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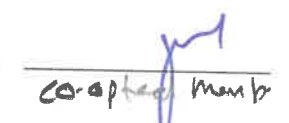
  
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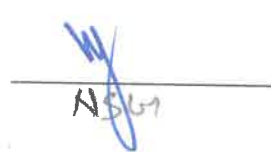
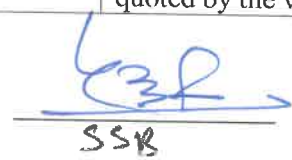
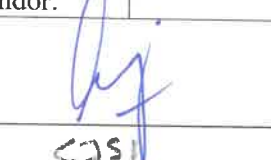



  
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<p>List of Equipment/Accessories</p>	<p>Prospective bidder should provide and fix:</p> <ul style="list-style-type: none"> <li>(a) SS Belay anchor point – 8 nos.</li> <li>(b) Climbing holds (Imported) – 250 nos. (with nut-bolt)</li> <li>(c) Speed climbing holds (20 Hand Holds + 11 Feet Holds) – 2 set</li> <li>(d) Dynamic climbing rope of 10.1 mm – 400 meter.</li> <li>(e) Sports climbing seat harness – 15 nos.</li> <li>(f) D-shaped screw carabineer – 25 nos.</li> <li>(g) Steel Quick Draw – 30 Nos.</li> <li>(h) Belay device – 10 nos.</li> <li>(i) GRIGRI – 4 nos.</li> <li>(j) Mittens – 20 Pair</li> <li>(k) Allen Keys – 5 Nos.</li> </ul> <p>Note: The above equipment/accessories must be CE, EN/UIAA/UL certified. Any additional tools/accessories required for the project may be quoted by the vendor.</p>	<p><b>Add(+) 02 more items i.e.</b></p> <ul style="list-style-type: none"> <li>(l) <b>Auto belay system( IFSC certified)</b></li> <li>(m) <b>Timing Device (IFSC certified)</b></li> </ul>	<p>According to the present scenario</p>	<p>As per existing QRs/TDs</p>	<p>As per requirement mentioned in the proposed QRs.</p>
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	<b>Design &amp; performance Criteria:-</b>	Walls shall withstand the effects of gravity loads, wind loads (130 km/hr wind load) and live loads determined according to ASCE/SE17..	The vender / firm will submit ASCE/SE 17 Std. Certificate.	Add(+) <b>EN 12572:2017 STANDARDS.</b>	For wider participation of Firms	The vender / firm will submit ASCE/SE 17/IS Std. Certificate.	As per requirement mentioned in the proposed QRs.
		Walls shall withstand the effects of earthquake motions as per ASCE/SE 17.	The vender / firm will submit ASCE/SE 17 Certificate.	Add(+) <b>EN 12572:2017 STANDARDS.</b>	For wider participation of Firms	The vender / firm will submit ASCE/SE 17/IS Std. Certificate.	-do-
		Walls to allow for thermal movements from ambient and surface temperature changes for temperature change of 40 deg. C to 100 deg. C, material surfaces.	The vender/firm will submit certificate from OEM in this regard.	There is no change.	-	-	-
	<b>Training &amp; risk management</b>	Manufacturers shall have a minimum of 03 years of experience working in the design and manufacturing of climbing wall.	Past performance/experience certificate to be produced before the board of officers in conformity of experience.	There is no change.	-	-	-
		The manufacturer shall provide risk management procedures in the form of a procedures manual designed specifically for the facility.	The vender/ firm will produce manual as required.	There is no change.	-	-	-
		The manufacturer shall provide onsite training for the Owner's personnel on risk management operations and maintenance.	The vender/firm will arrange training of 20 Master trainers for 2 weeks. 8 Hours per day.	There is no change.	-	-	-
		All training shall be managed by personnel holding certifications from Climbing Wall association (CWA)	The vender/firm will submit CWA approved certificate before the Board of Officers for checking.	All training shall be managed by personnel holding certifications from Climbing Wall association (CWA)/ IMF	For wider participation of Firms	The vender/firm will submit CWA/ IMF approved certificate before the Board of Officers for checking.	As per requirement mentioned in the proposed QRs.

The remarks has been given by DC Engr (Co-opted Member) as shown in Note

As per old QRs

Platform for slithering and rappelling shall be as per organizational requirement with provision of shed kept optional.

**Photographs attached are symbolic and may vary with the customization/ requirements of individual organization.**

Landing Area around the climbing structure

S/No	Items	Dimensions
1	Height of perimeter wall	2 ft 4 inch
2	Length	21.8 Mtr
3	Breadth	21.8 Mtr

Proposal QRs

No change

NOTE:

1. Complete wall Dupont system including foundation may be designed by vendor & vetted by IIT to ascertain structural safety & stability.

2. 15m is standard height & same has also been approved by IFSC (International Federation of Sport Climbing) (copy attached)-A

**Gymnastic Landing Mats optional for additional safety to avoid injuries .**

**Timing devices optional**

**Note :-**

Different configurations have been worked out keeping in view the general requirements. However, the artificial climbing wall may be customized i.e. **different height, width, type and number of faces**, depending on following:-

- 1) Organizational specific combat requirements.
- 2) Institutions training capacity and requirements.
- 3) Infrastructure for training to participate in wall climbing competitions.

(Shri V.K. Singh)  
DIG. CRPF  
Member

(Major Vikram Jadhav)  
NSG  
Member

(Vijay Kr. Kaswa)  
Dy. Comdt. SSB  
Member

(Amit J.)  
Dy Comdt. CISF,  
Member

(Alok Sudhanshu)  
AC/GD, ITBP  
Member

(Arjun C.V.)  
AC, BSF  
Member

(Kaved Jindal)  
DC (Engr)  
Works Dte., CRPF  
Co-opted Member

ADG (Trg)  
(Chairman/P.O)



## 1. Part I – Artificial structure – Official Speed Walls

### 1.1 Wall specifications

The IFSC approved Speed walls shall be designed as follow:

#### 1.1.1. Heights:

- i. 15.00 m
- ii. The climbing walls start 20 cm above the ground and must continue at least 50 cm above the last panel. The gap between the ground and the start of the wall could be filled with additional panels.

#### 1.1.2. Width:

- i. 3.00 m + 3.00 m
- ii. two climbing walls side by side.
- iii. Additional space of one meter on each side should be kept free from any construction
- iv. The climbing walls can be adjacent or separate, in latter case separation cannot exceed 50cm.

#### 1.1.3. Panel specifications

- i. Height = 1500 mm (tolerance:  $\pm 1$  mm)
- ii. Length = 1500 mm (tolerance:  $\pm 1$  mm)
- iii. In exceptional circumstances, if the panels used are not available in format 150x150, IFSC could accept the use of different panels. However, to be homologated, the global grid shall meet the same requirements than a one built with 150x150 panels. With specific regards to the tolerance, tolerance between 150x150 should always be 1 mm.

#### 1.1.4. Inclination:

- i. The climbing walls must overhang regularly  $5^\circ$
- ii. Average wall inclination tolerances are  $-0.5^\circ/+1.5^\circ$  (maximum between  $4.5^\circ$  to  $6.5^\circ$ ). Between any two measured points the angle difference cannot be higher than  $1^\circ$
- iii. Panel alignment should not exceed 2 mm (see chapter 3 for reference)

#### 1.1.5. Individual Top Protection Point (ITRS)

- i. The Individual top protection points are installed on the metallic structure located between 500mm and 1000mm vertically upwards and between 500mm and 1000mm horizontally outwards from the top edge of the 0,50m top panel (15500mm).
- ii. The ITRS (for each Climbing Line) should be located at the central axis of the route, with a tolerance of  $\pm 50$ mm
- iii. The ITRS of both lanes should be installed with the same distances to each lane
- iv. The ITRS instalment shall respect the EN 12572-1.
- v. The auto-belay should be installed on a fixed anchor point

#### 1.1.6. Grid of Panel Insert Holds



- i. The panels will have a standard grid of holes - see table below on chapter 1.2
- ii. Inter holes vertical distance = 125 mm (tolerance  $\pm 1$  mm)
- iii. Inter-panel – vertical distance = 375 mm (tolerance  $\pm 2$  mm)
- iv. Edge (horizontal) to hole vertical distance = 187.5 mm (tolerance  $\pm 1$  mm)
- v. Inter-panel – horizontal distance = 250 mm (tolerance  $\pm 1$  mm)
- vi. Inter-holes – horizontal distance = 125 mm (tolerance  $\pm 1$  mm)

#### 1.1.7. Vertical distances

- i. The measures between the bottom of the finishing pad and the ground should be mm 14800 (+/- 20 mm)
- ii. The distance between the starting hold (axis of the screw of the lowest starting hand hold) to the ground (no starting pad) shall be mm 1 887 (Tolerance +/- 10mm)
- iii. Similar control should be taken from other parallel holes, to make sure that the distance to the ground is respected.

#### 1.1.8. Friction

- i. The ideal Static Friction Coefficient is between 1 to 1,5. The coefficient measures the friction between the speed panels on horizontal surface and climbing standard rubber (X-Grip2 or equivalent)

#### 1.1.9. Colour

- i. A light grey (ref RAL 7035/7001/7038/7044/9002/9018) must be used for climbable surface

#### 1.1.10. Logos

- ii. The speed wall should be free from any logo

#### 1.1.11. Ground

- i. Measure of the flat platform/ground should be minimum 8 meters wide and 4,3 deep backwards (for competition walls)
- ii. The base of the wall shall be a hard and stable surface. The flatness of the ground should be flat and uniform along the 8 meters.
- iii. In case mats are installed at the base of the wall, they should be removable

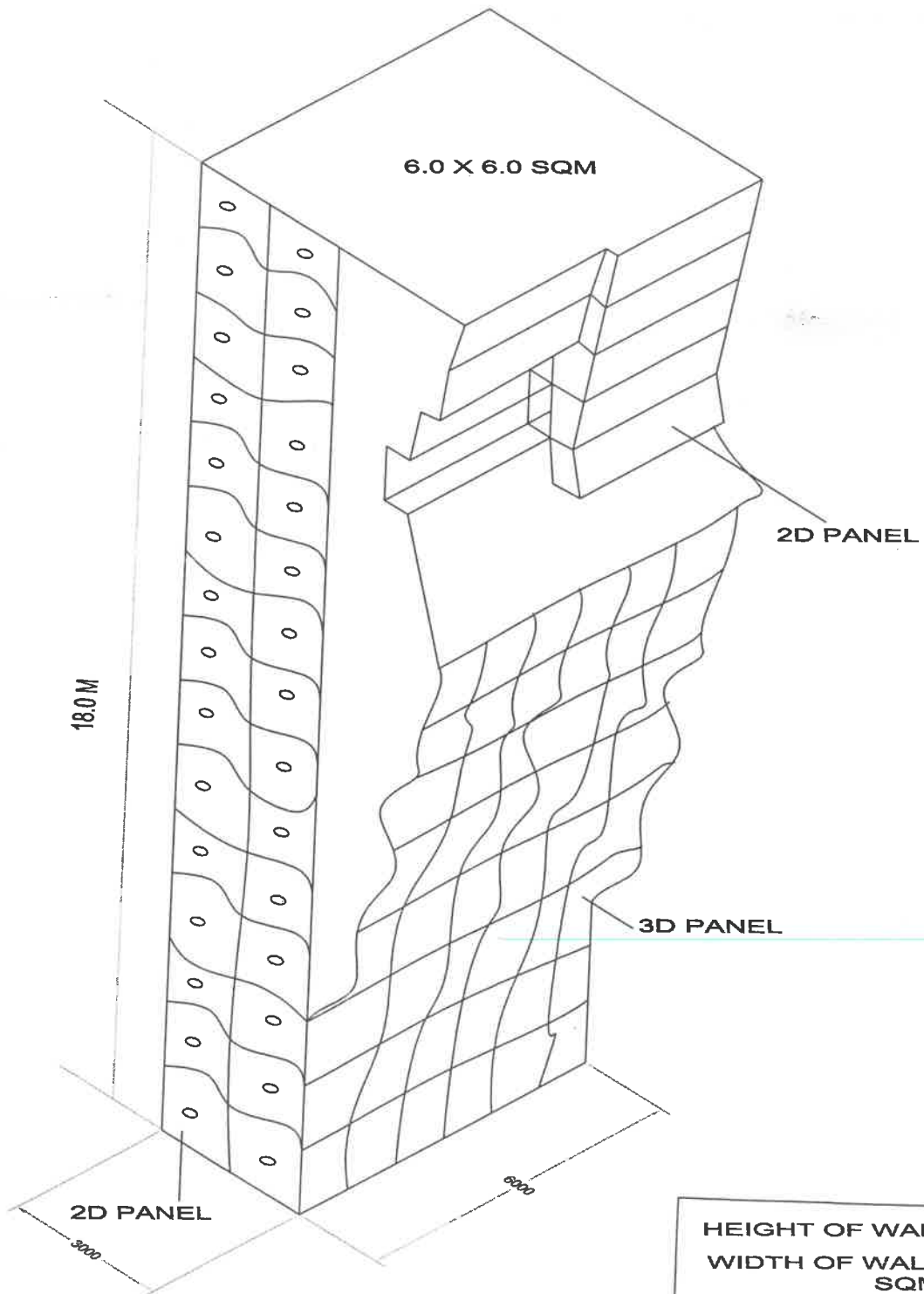
#### 1.1.12. Frequency of control

- i. All the specifications included into the current paragraph should be checked at least every 4 years





**SCHEMATIC DIAGRAM OF  
ARTIFICIAL ROCK CLIMBING WALL**



HEIGHT OF WALL- 18.0 M  
WIDTH OF WALL- 6.0X6.0  
SQM ON TOP  
WIDTH OF WALL- 6.0X3.0  
SQM ON BOTTOM  
DEPTH OF BASE- 2.0 M

भारत सरकार/गृह मंत्रालय,  
महानिदेशालय  
(प्रशिक्षण शाखा),  
केन्द्रीय रिजर्व पुलिस बल,  
पूर्वी खण्ड 10, तल 7  
आर. के. पुरम नई दिल्ली - 110066



Govt. of India/MHA  
Directorate General  
(Training Branch)  
Central Reserve Police Force  
East Block No. 10, Level-7,  
R.K. Puram, New Delhi-110066

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सं० एल.सात-15/2021-26-(Mod-IV)- प्रशि-5(संभरण)  
सेवा में

दिनांक 20 जुलाई 2023

अनुभाग अधिकारी,  
रूम न०-10, (IT Cell) एन.आई.सी.  
नॉर्थ बलाक, गृह मंत्रालय,  
नई दिल्ली ।  
ईमेल - [soit@nic.in](mailto:soit@nic.in) ( एसओआईटी@एनआईसी.इन )

विषय :- 15 दिनों के लिए गृह मंत्रालय वेबसाइट पर रिवीजन क्यूआर/ ट्रायल डायरेक्टिव की होस्टिंग ।

कृपया गृह मंत्रालय, पीएम डिविजन के पत्र सं० IV-24011/12/2011-Prov.1 दिनांक 13 जून, 2012 और पत्र सं- 11012/02/2009-Fin-I-Prov.1-17 दिनांक 02 जनवरी, 2018 का संदर्भ में ।

2. आर्टीफिशियल क्लाइबिंग दीवार का क्यूआरएस/टी.डी.एस. में रिवीजन/संशोधन के लिए उप समूह की बैठक मुख्यालय, प्रशिक्षण निदेशालय, के०रि०पु०बल में दिनांक 04 जुलाई 2023 को 1200 बजे आयोजित हुई ।

3. बैठक के दौरान उप समूह ने कहा कि विकेताओं की टिप्पणियों /सुझावों को आमंत्रित करने के लिए आर्टीफिशियल क्लाइबिंग दीवार के रिवीजन/संशोधन क्यूआरएस/टी.डी.एस.के मसौदे को 15 दिनों के लिए के०रि०पु०बल के साथ-साथ गृह मंत्रालय की वेबसाइट पर डाला जाए ।

3. पीएम डिवीजन के उपर्युक्त संदर्भित पत्रों के अनुसार आर्टीफिशियल क्लाइबिंग दीवार के रिवीजन/संशोधन क्यूआरएस/टी.डी.एस. का मसौदे संलग्न परिशिष्ट के अनुसार गृह मंत्रालय की वेबसाइट पर डालने हेतु प्रिंटेड कॉपी तथा सॉफ्ट कॉपी भी भेजा जा रहा है ।

संलग्न :- 1. उपरोक्त क्यूआरएस/टी.डी.एस का मसौदा ।  
2. परिपत्र (Circular).

*[Signature]* 20/7

( डा० प्रेम चन्द )  
पुलिस उप महानिरीक्षक (प्रशि०-दो)

सं० एल.सात-15/2021-26-(Mod-IV)- प्रशि-5(संभरण)  
प्रतिलिपि :-

दिनांक 20 जुलाई 2023

पुलिस उप महानिरी० (संभरण/आयुध), महानिदेशालय, के०रि०पु०बल, नई दिल्ली को सूचनार्थ प्रेषित है ।

*[Signature]*  
( डा० प्रेम चन्द )  
पुलिस उप महानिरीक्षक (प्रशि०-दो)

## परिपत्र

भारत सरकार/गृह मंत्रालय,  
महानिदेशालय  
(प्रशिक्षण शाखा),  
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Govt. of India/MHA  
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सं० एल.सात-15/2021-26-(Mod-IV)- प्रशि-5

दिनांक 29 जुलाई 2023

विषय :- आर्टीफिशियल क्लाइंबिंग दीवार (ऊपर चढ़ने वाली बनावटी दीवार) के क्यू.आर.एस. /टी.डी.एस. का रिवीजन के मसौदे पर विक्रेताओं की टिप्पणियों का आमंत्रण

1. आपको सूचित किया जाता है कि आर्टीफिशियल क्लाइंबिंग दीवार (ऊपर चढ़ने वाली बनावटी दीवार) के क्यू.आर.एस./टी.डी.एस. का रिवीजन के मसौदे पर फर्म /विक्रेताओं की टिप्पणियां आमंत्रित हैं। सभी फर्मों से निवेदन हैं कि नीचे दिए गए प्रारूप में OEM(Original Equipment Manufacturer) certificate एवं Make In India(MII) compliance certificate सहित अपनी टिप्पणियां भरकर निचे लिखित पते पर डाक/फैक्स/ई-मेल पर भेजें।

गुणात्मक आवश्यकता (QRs)	परीक्षण निर्देश (TDs)	फर्म द्वारा टिप्पणियां
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2. आपसे अनुरोध है कि वेबसाइट पर प्रदर्शित हो की रासीख से 15 दिनों के भीतर अपनी टिप्पणियां भेजें। उप समूह कमेटी की बैठक में उपर्युक्त क्लाइंबिंग दीवार के रिवीजन क्यू.आर.एस./टी.डी.एस. को अंतिम रूप देने पर विचार किया जा रहा है।

डाक का पता:-  
महानिरीक्षक (प्रशिक्षण)  
महानिदेशालय, केरिपुबल  
ईस्ट ब्लॉक सं०-10, लेवल-7  
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( डा० प्रेम चन्द )  
पुलिस उप महानिरीक्षक (प्रशि०-दो)