

ABU Asia-Pacific Robot Contest 2026 Hong Kong, China



Hong Kong, China
ABU Asia-Pacific Robot Contest

Appendix V1.1 - “Kung Fu Quest”

2 February 2026

Asia-Pacific Robot Contest 2026 Hong Kong, China

Organising Committee

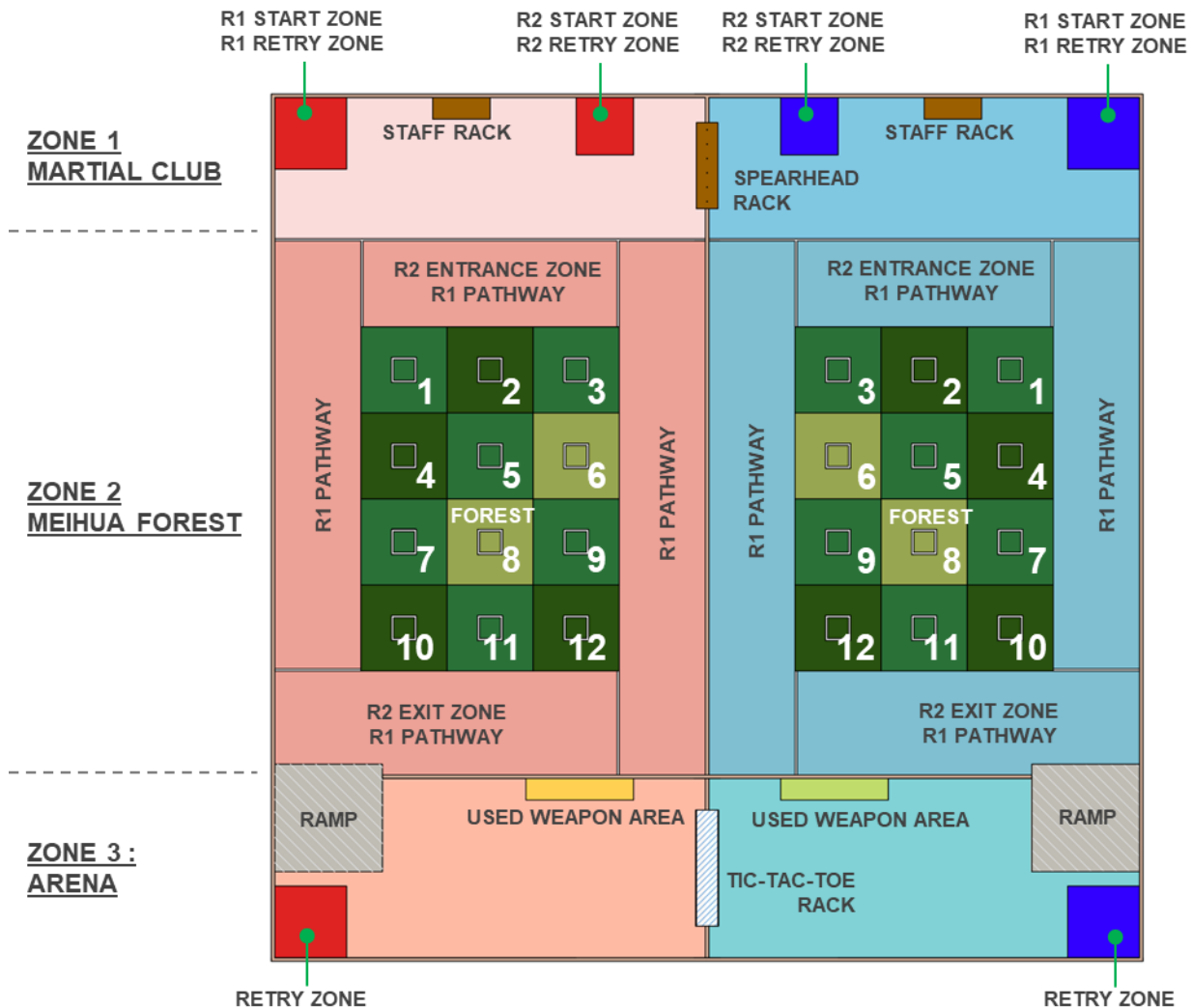
[<https://www.rthk.hk/aburobocon2026>]

Appendix

Version	Released Date	Summary	Approved By
0	2025/08/24	- Initial release with Rulebook	Organizing Committee
1.0	2025/10/9	- 2 nd release	Organizing Committee
1.1	2026/02/02	- 3 rd release	Organizing Committee

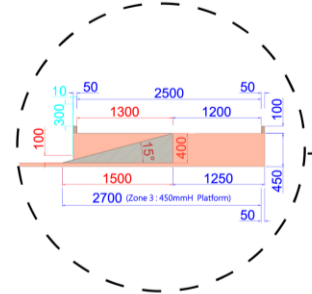
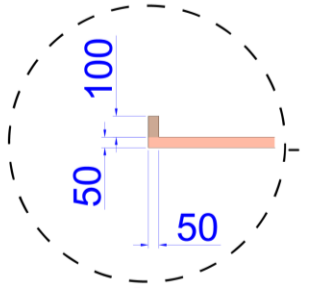
Content

- Appendix 1 – Game Field
- Appendix 1 – Game Field Dimension
- Appendix 1 – Game Field Isometric
- Appendix 1.1 – Game Field Arena Fencing
- Appendix 1.2 – Meihua Forest
- Appendix 1.2 – Meihua Forest Isometric
- Appendix 2.1 – Staff
- Appendix 2.2.1 – Spearhead (Fist) **NEW**
- Appendix 2.2.1 – Spearhead (Palm) **NEW**
- Appendix 2.2.1 – Spearhead (Spear) **NEW**
- Appendix 2.2 – Assembled Weapon Length **NEW**
- Appendix 2.3 – Staff Rack
- Appendix 2.3 – Staff Rack Isometric
- Appendix 2.4 – Spearhead Rack
- Appendix 2.4 – Spearhead Rack Isometric
- Appendix 2.5 – Spearhead Orientation
- Appendix 3 – Tic-Tac-Toe Rack
- Appendix 3 – Tic-Tac-Toe Rack Isometric
- Appendix 4.1 – Kung Fu Scroll Carton **NEW**
- Appendix 4.3 – Kung Fu Scroll Recognition Patterns **NEW**

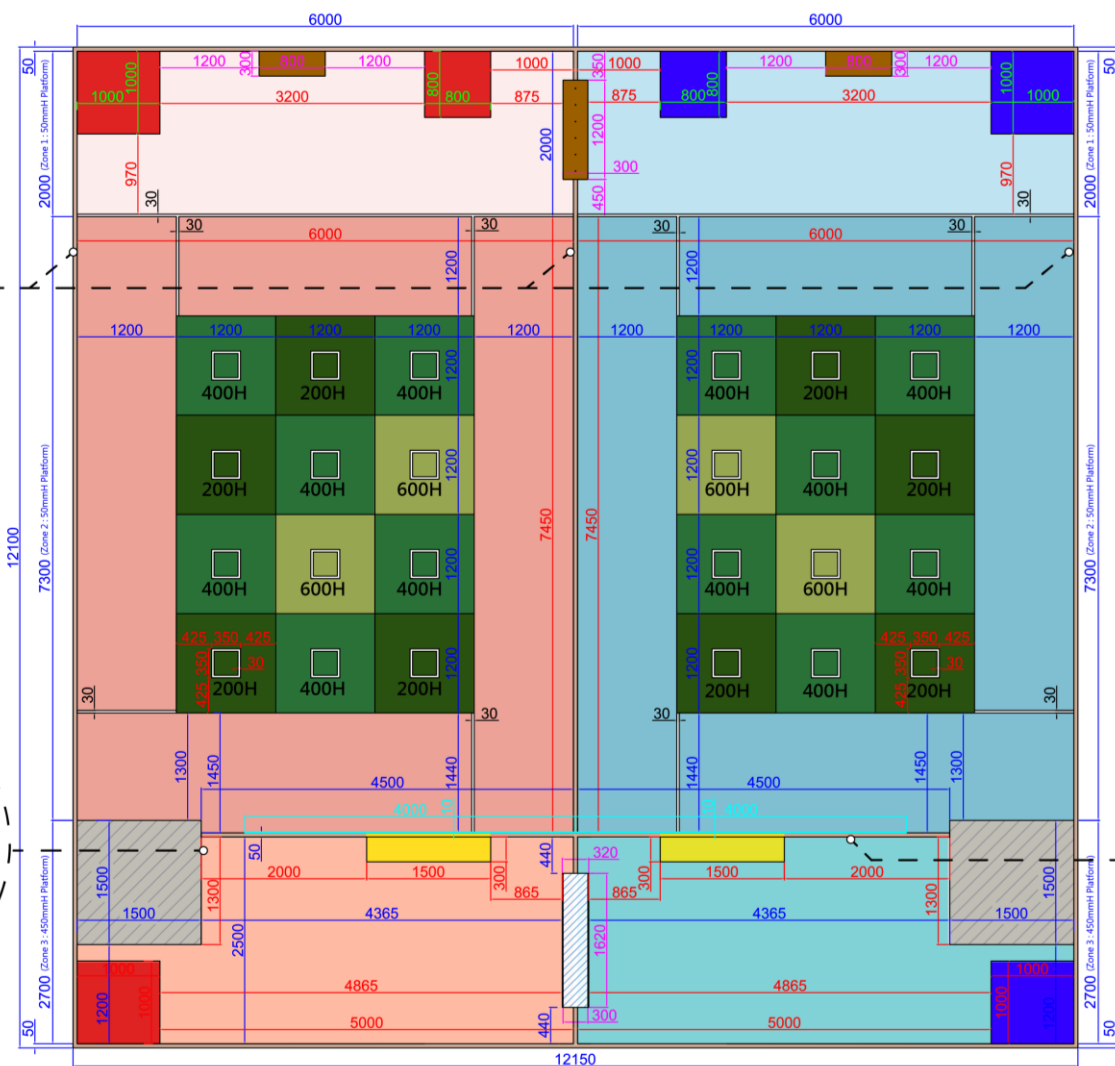


Appendix 1 – Game Field Dimension

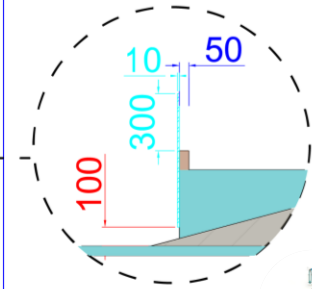
Fence :
100mmH x 50mmW

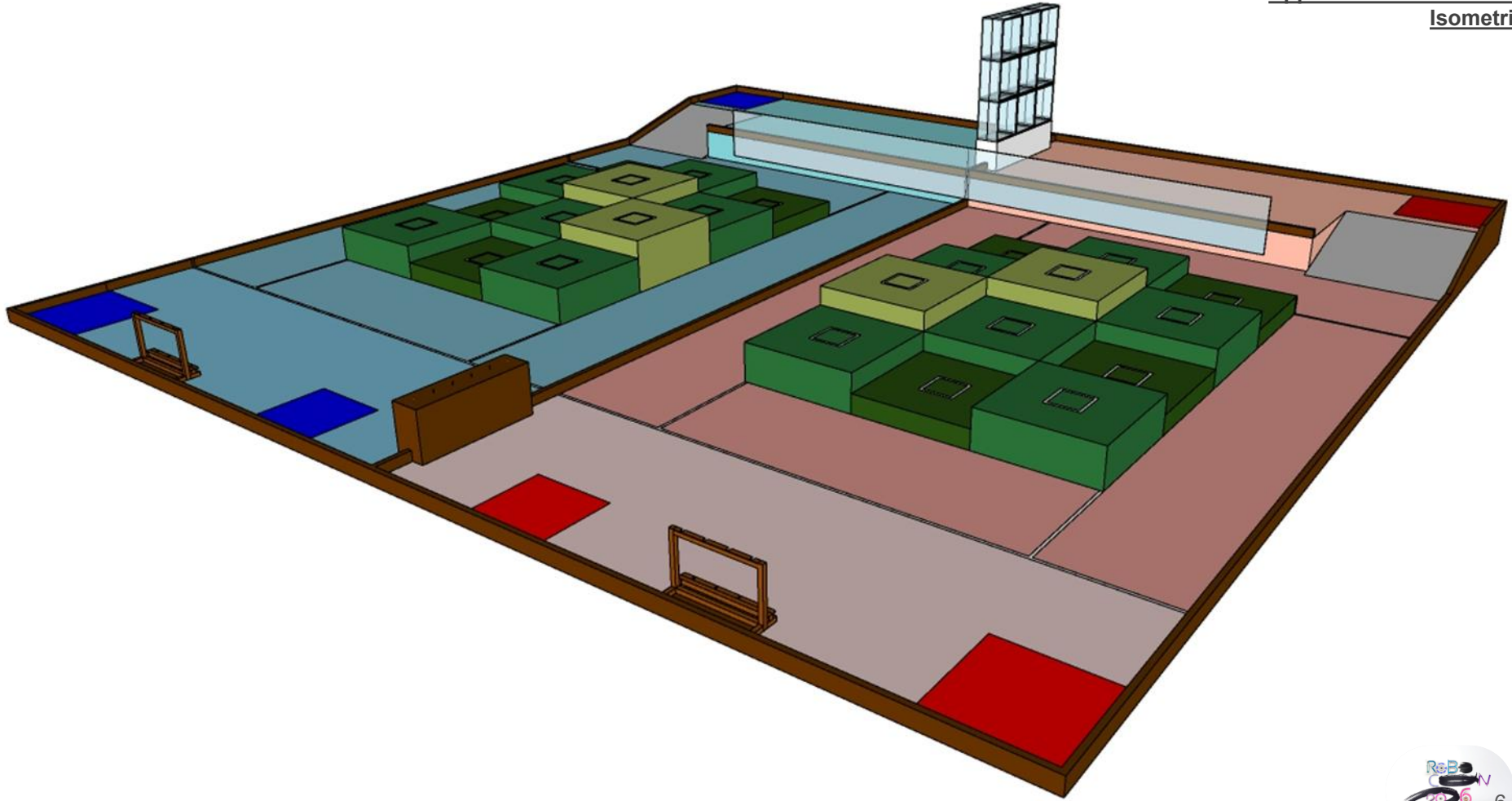


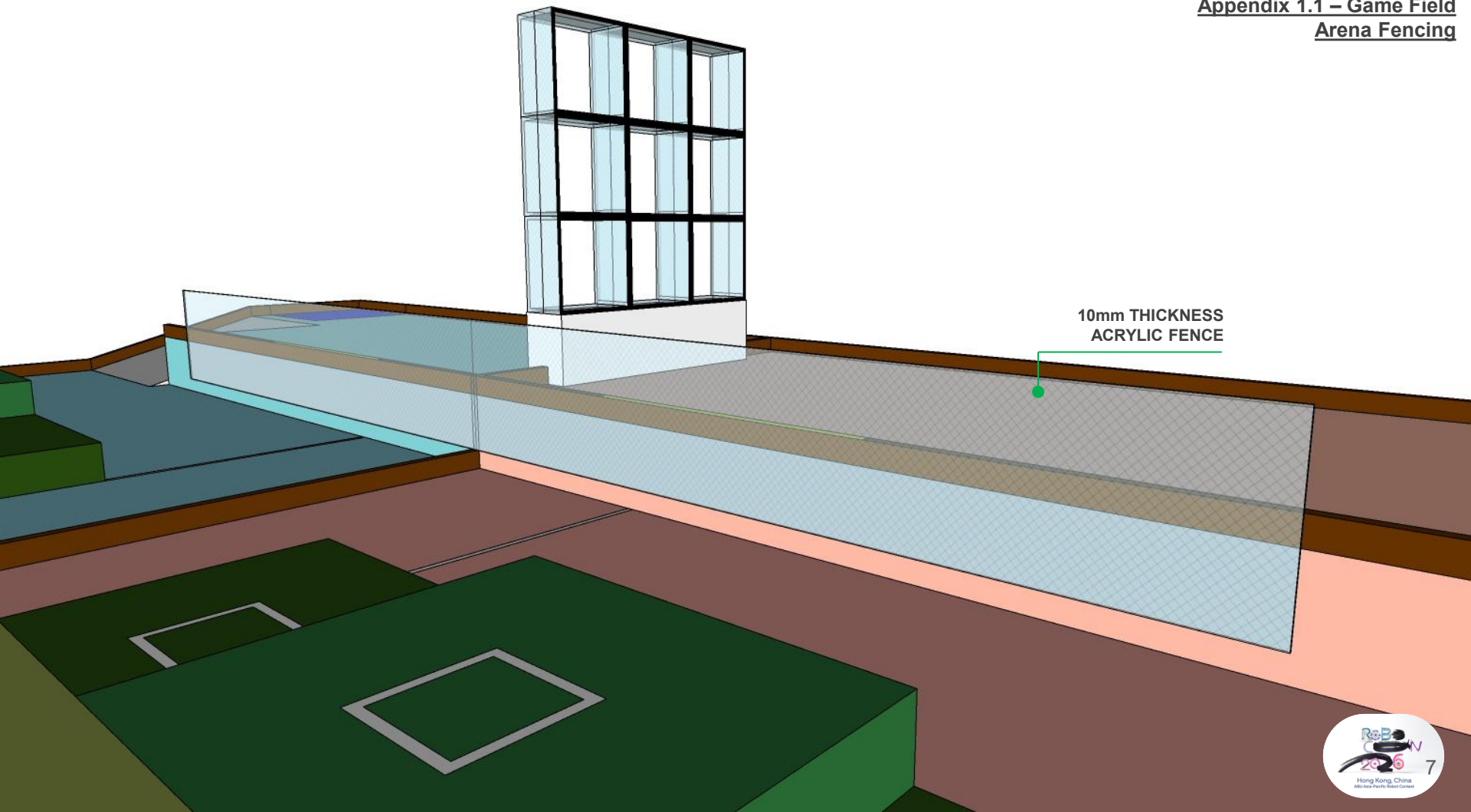
Note :
All dimension in mm.



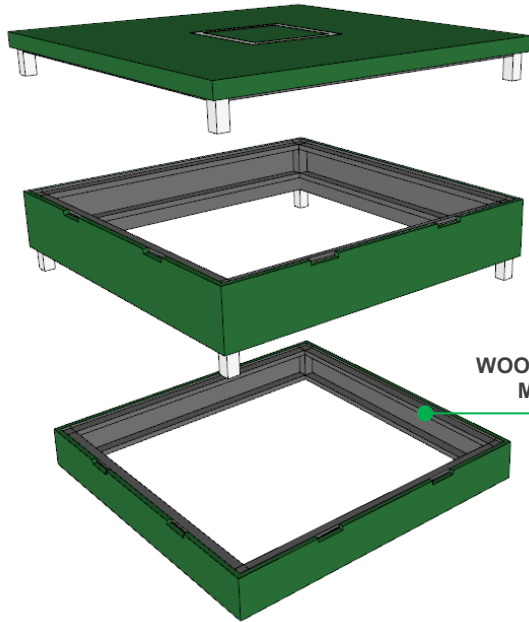
10mm Thickness Acrylic Fence :





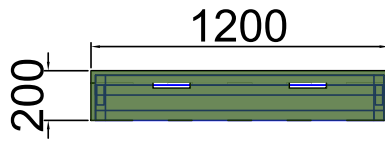
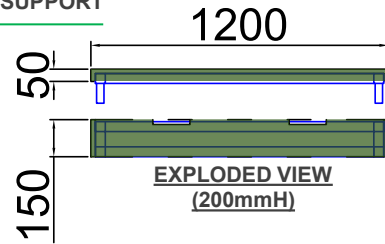


10mm THICKNESS
ACRYLIC FENCE



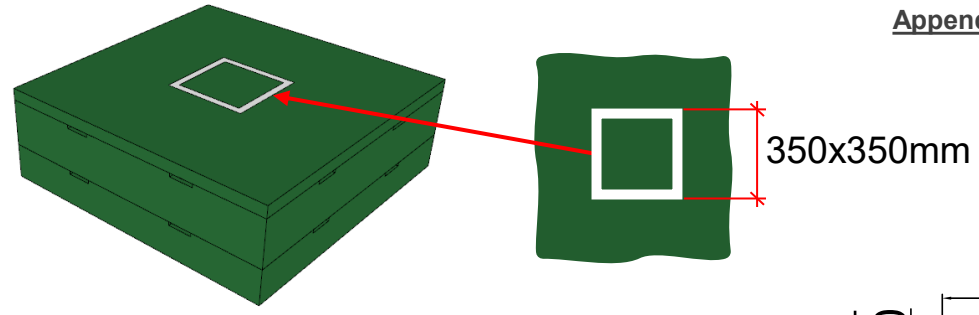
EXPLODED VIEW
(400mmH)

WOODEN BASE WITH
METAL SUPPORT

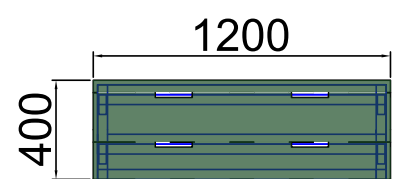
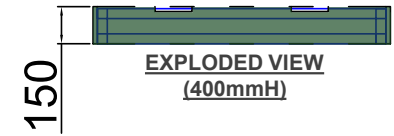
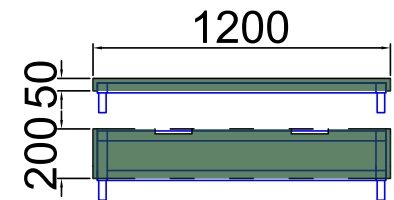


FRONT VIEW
(200mmH)

FRONT VIEW
(400mmH)



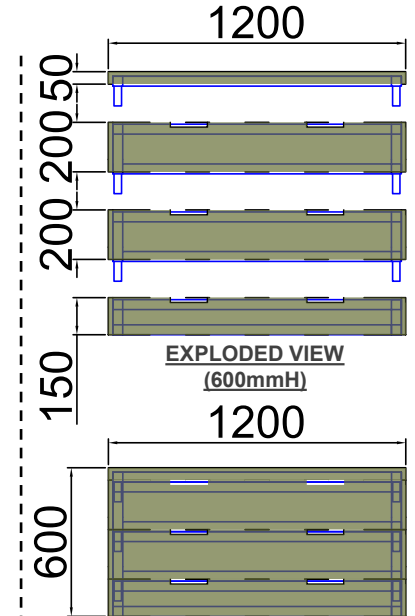
PREVIEW
(400mmH)



FRONT VIEW
(200mmH)

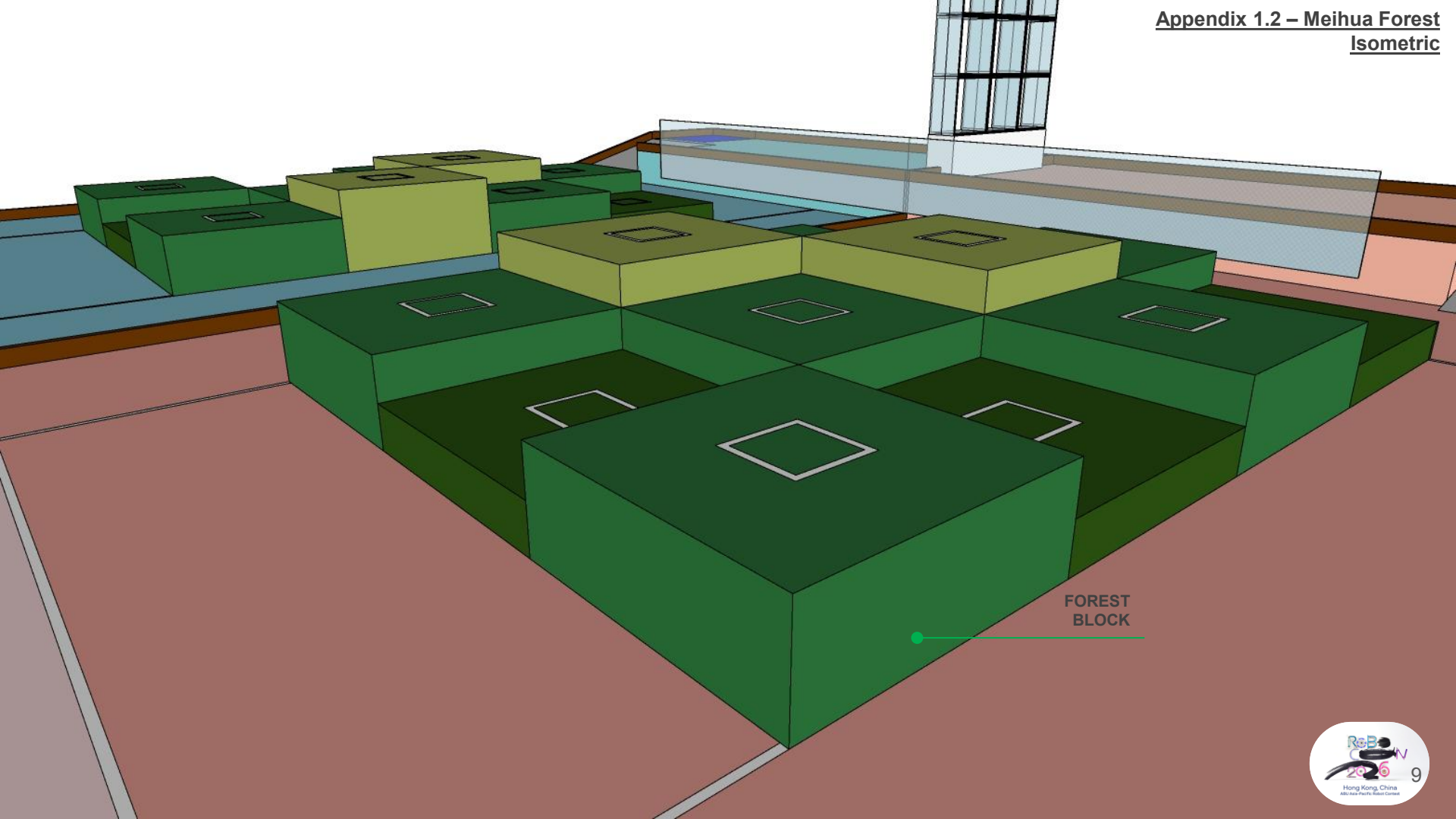
FRONT VIEW
(400mmH)

FRONT VIEW
(600mmH)



FRONT VIEW
(600mmH)

NOTE:
ALL DIMENSION IN MM.



FOREST
BLOCK



30PM Quick Coupler



PVC wall thickness



PVC Diameter



Assembled staff

Material: PVC pipe glued with assemble connector (POM Quick Coupler)

PVC Pipe: Length 1000mm, Outer Diameter 20.3mm ($\pm 1\%$); Wall thickness 2.0mm ($\pm 1\%$)

POM Quick Coupler: 30PM, Weight: 6g

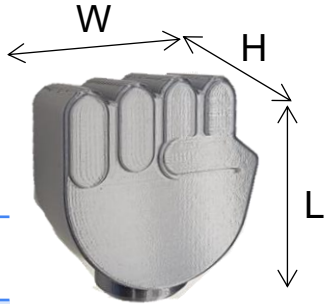
Total Length: 1027mm ($\pm 0.5\%$)

Total Weight: ~195g ($\pm 3\%$)



Assembled Item	Material	Assembled Length	Assembled Weight
Spearhead – Fist	PLA/ ABS assemble with connector (Plastic Quick Coupler)	128mm (±1%)	102g (±5%)

Items	Material	Model	Weight	Length
Connector (Quick Coupler)	POM	40SM	22g (±5%)	52.5mm (±0.5%)



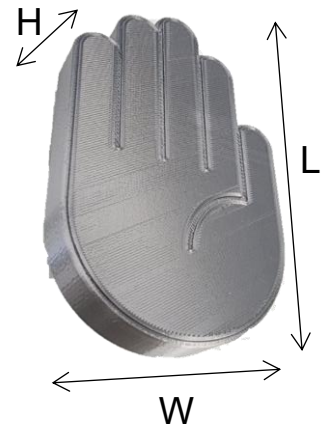
Items	Methodology	Material	Wall Thickness	infill	Thread	Dimension (LxWxH)	Weight
Fist	3D printing	PLA ABS	1.6mm 1.52mm	10% 17%	G1/2-14	89x84x50mm (±5%)	80g (±5%)

The color, material, and configuration shown are illustrative. Dimensions and weight specifications take precedence.



Assembled Item	Material	Assembled Length	Assembled Weight
Spearhead – Palm	PLA/ABS assemble with connector (Plastic Quick Coupler)	80mm (±1%)	100g (±5%)

Items	Material	Model	Weight	Length
Connector (Quick Coupler)	POM	40SM	22g (±5%)	52.5mm (±0.5%)



Items	Methodology	Material	Wall Thickness	infill	Thread	Dimension (LxWxH)	Weight
Palm	3D printing	PLA ABS	1.6mm 1.52mm	10% 17%	G1/2-14	133.6x84x41mm (±5%)	78g (±5%)

The color, material, and configuration shown are illustrative. Dimensions and weight specifications take precedence.



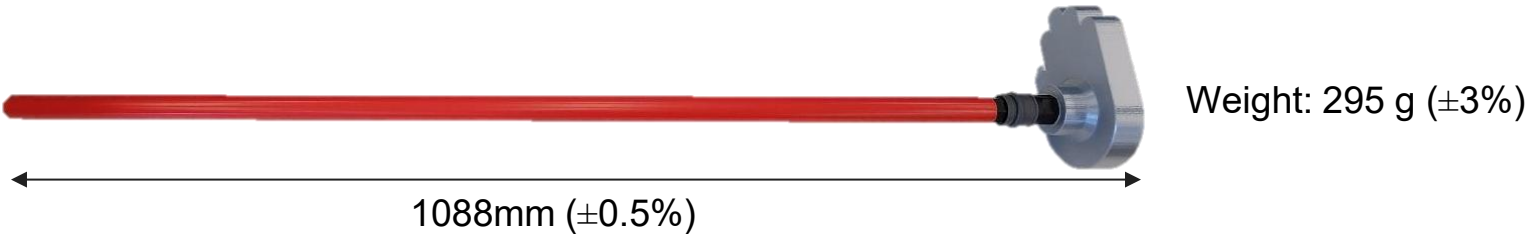
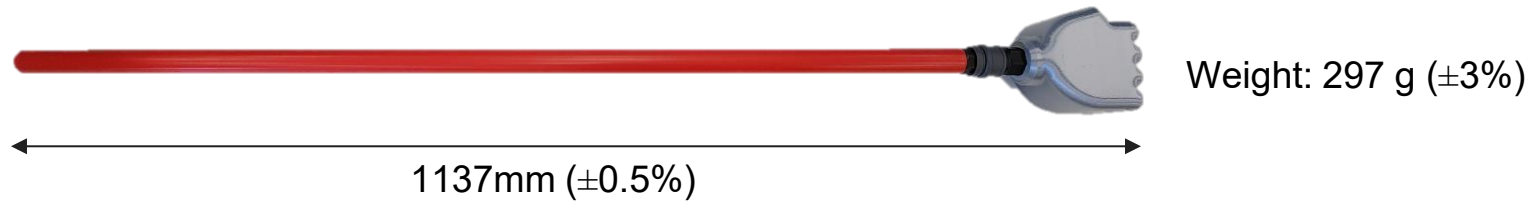
Assembled Item	Material	Assembled Length	Assembled Weight
Spearhead – Spear	PLA/ABS assemble with connector (Plastic Quick Coupler)	288mm (±1%)	117g (±5%)

Items	Material	Model	Weight	Length
Connector (Quick Coupler)	POM	40SM	22g (±5%)	52.5mm (±0.5%)

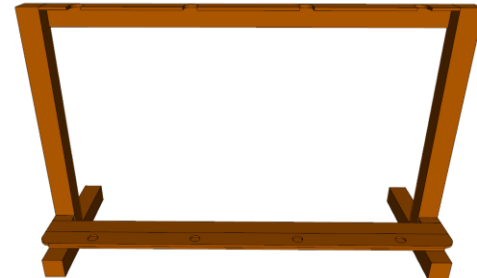
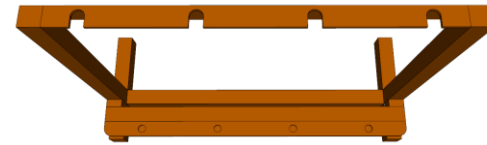
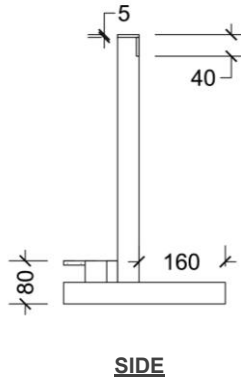
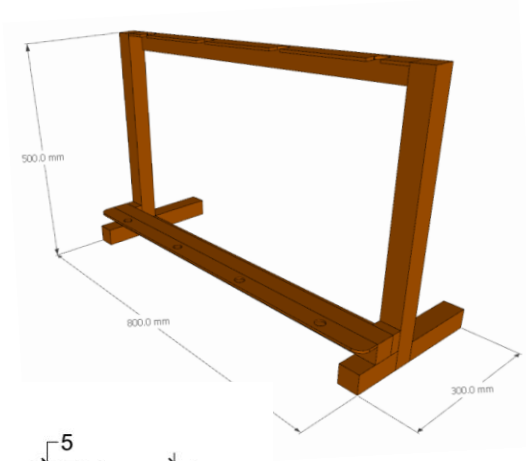
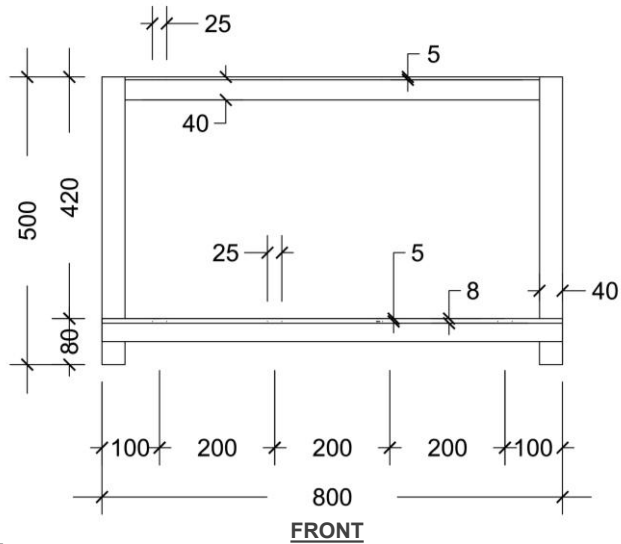
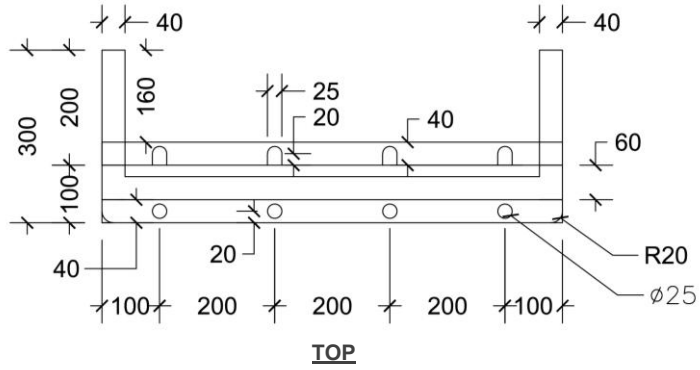


Items	Methodology	Material	Wall Thickness	infill	Thread	Dimension (LxWxH)	Weight
Spear	3D printing	PLA ABS	1.6mm 1.52mm	10% 17%	G1/2-14	251x77x35.8mm (±5%)	95g (±5%)

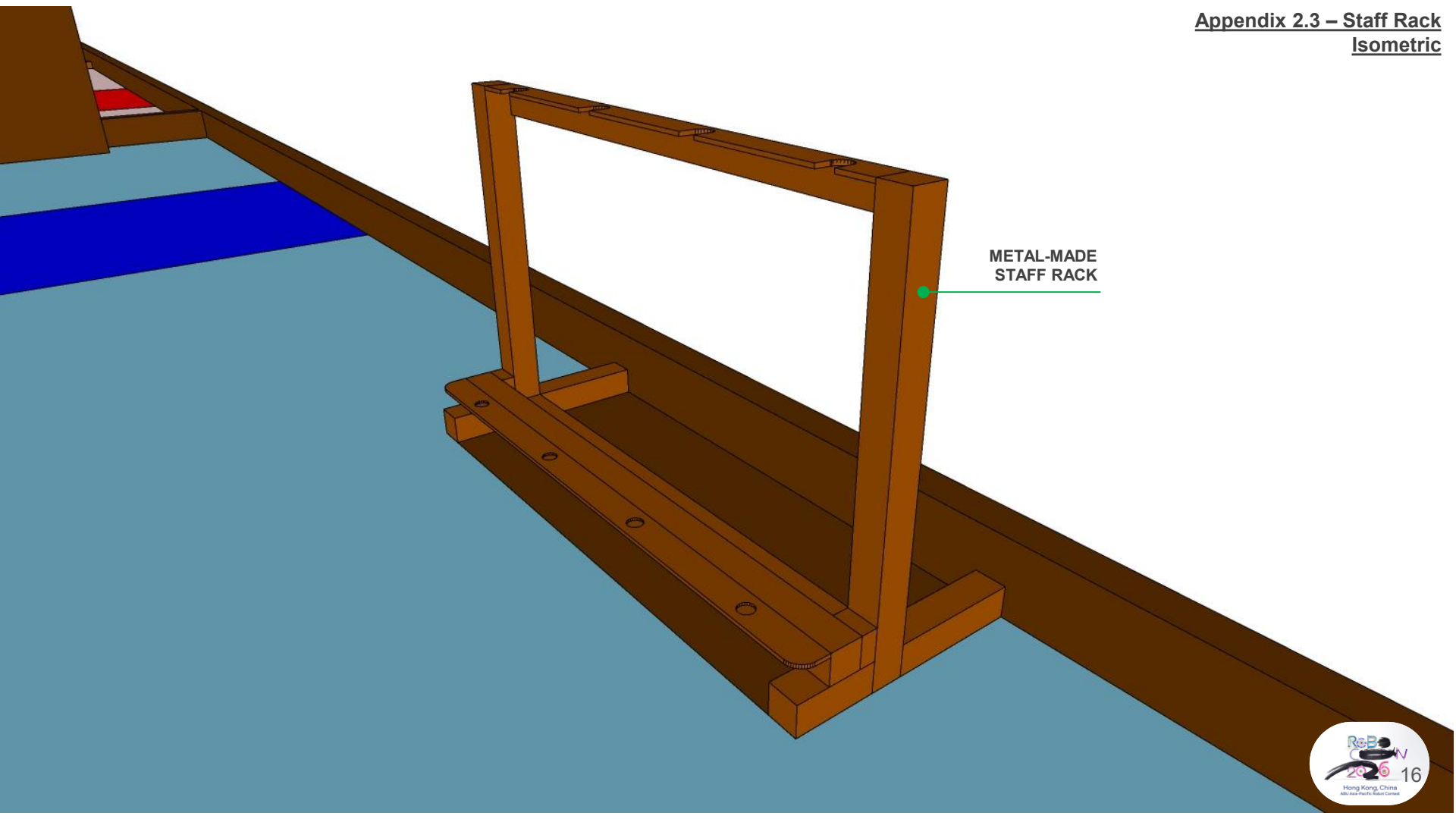
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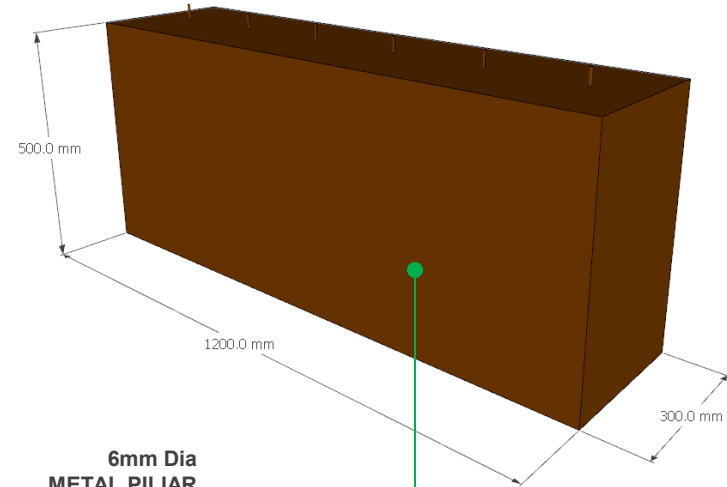
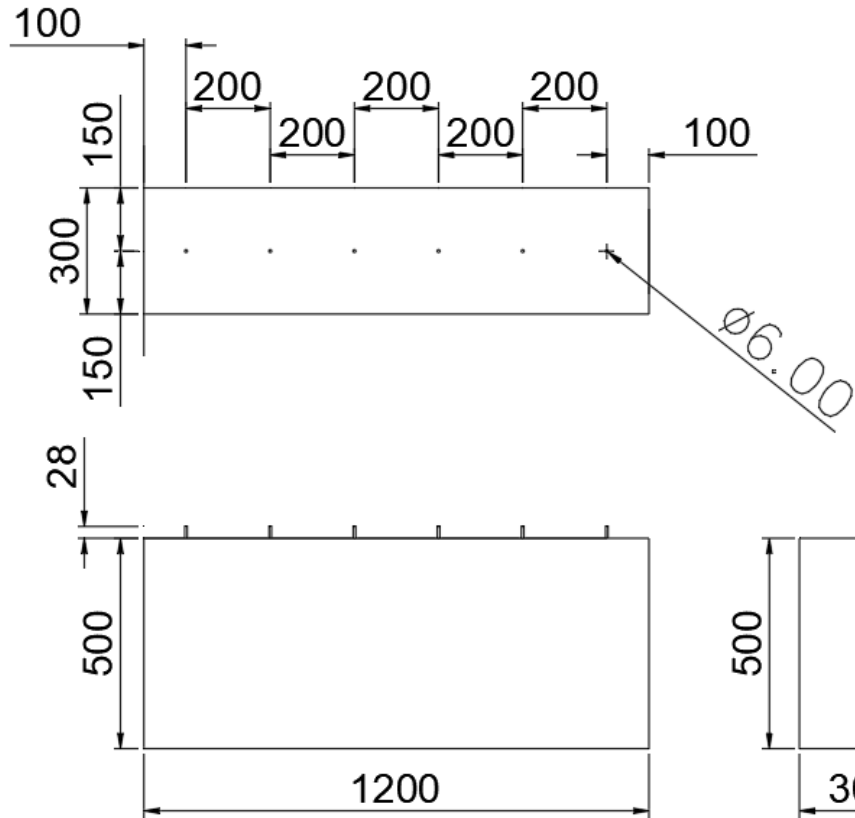
The color shown are illustrative. Dimensions and weight specifications take precedence.



NOTE:
ALL DIMENSION IN MM.



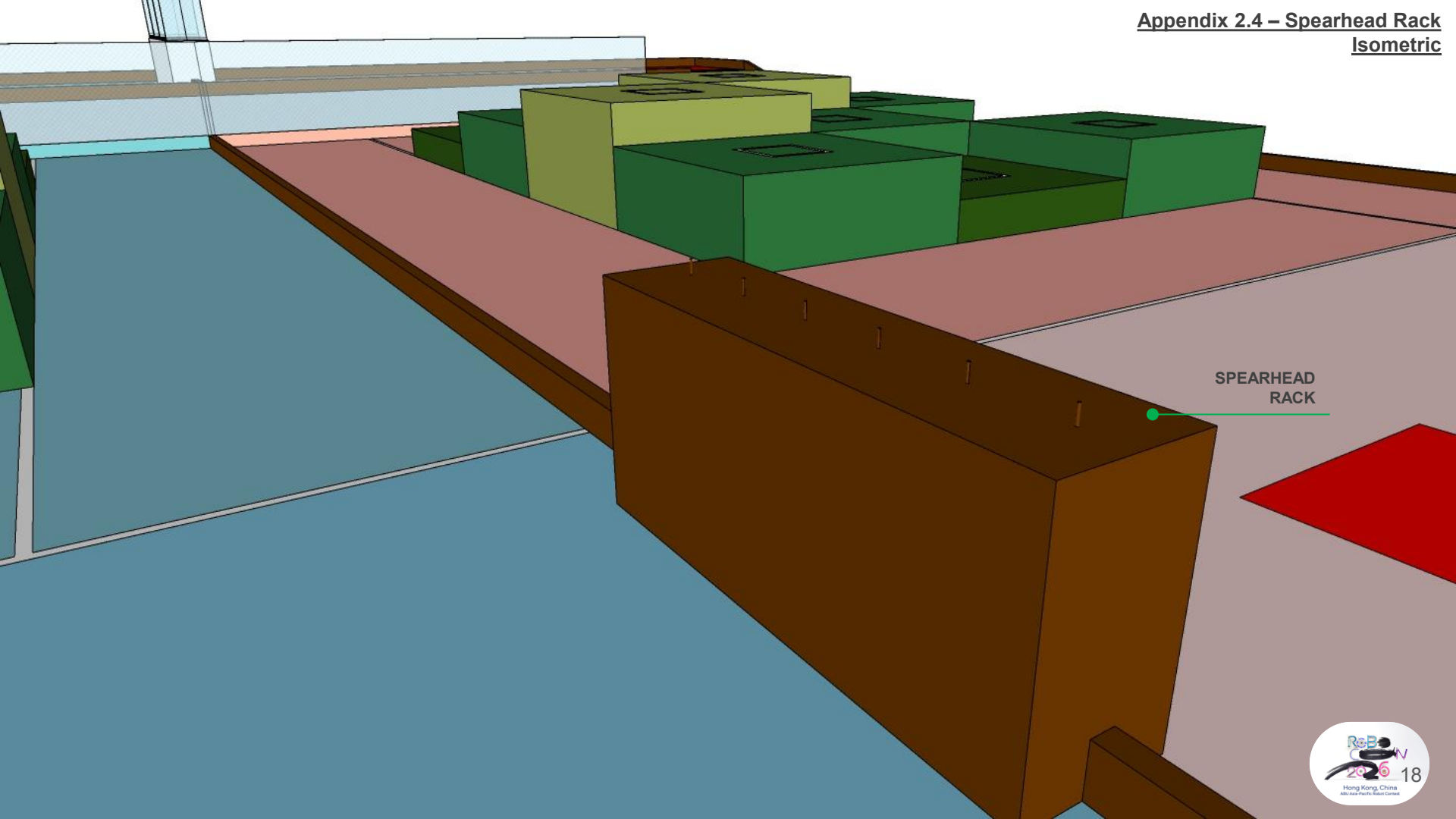
METAL-MADE
STAFF RACK



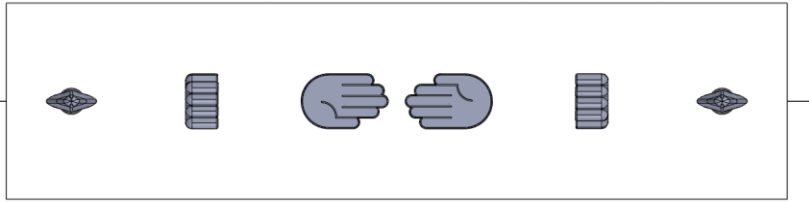
6mm Dia
METAL PILIAR

WOODEN BASE WITH
METAL SUPPORT

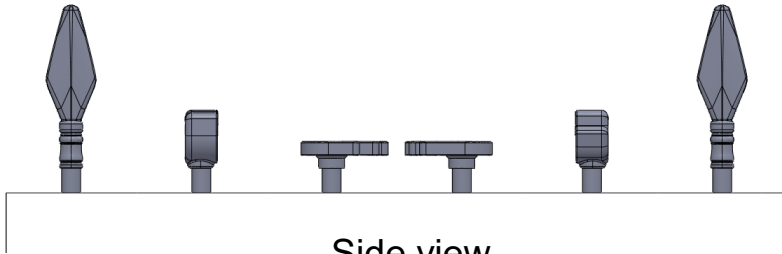
NOTE:
ALL DIMENSION IN MM.



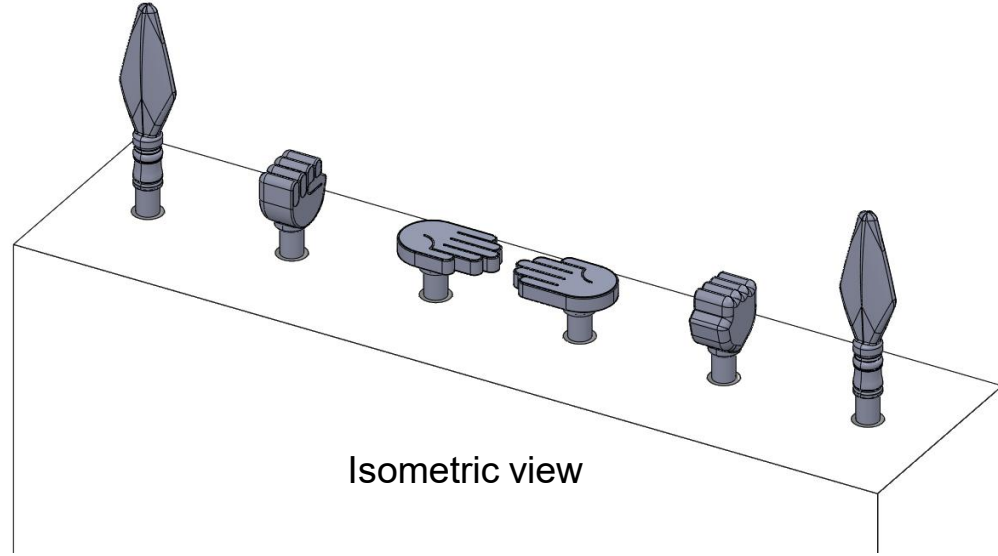
SPEARHEAD
RACK



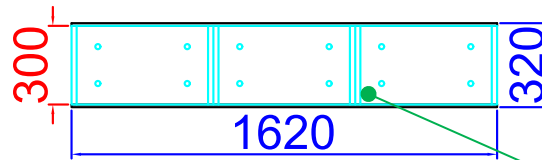
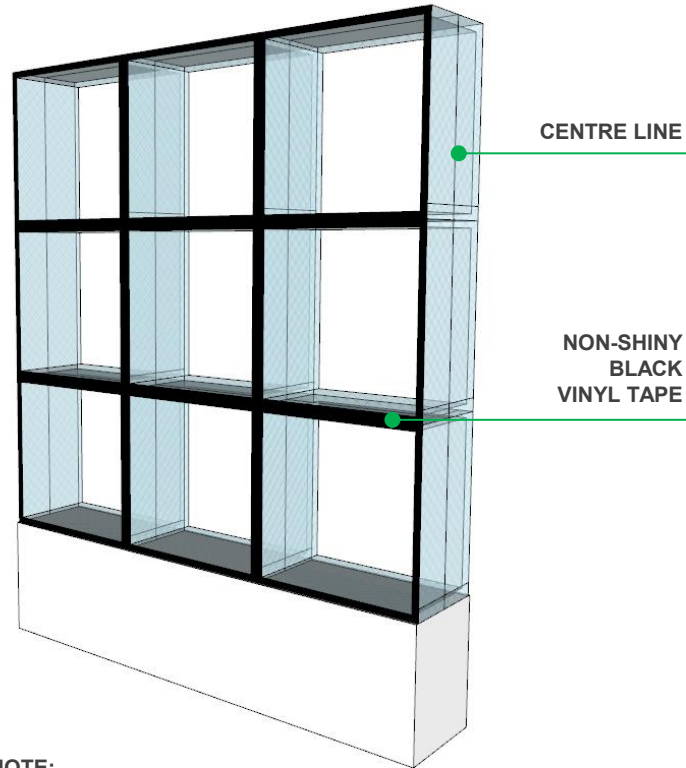
Top view



Side view

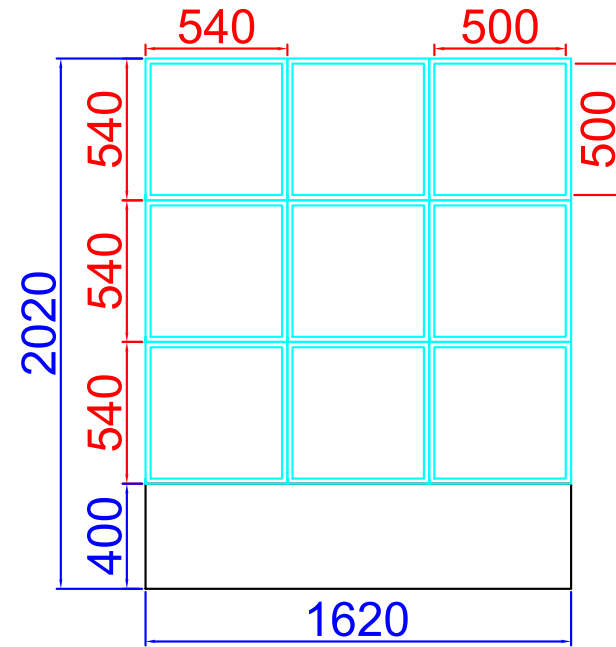


Isometric view

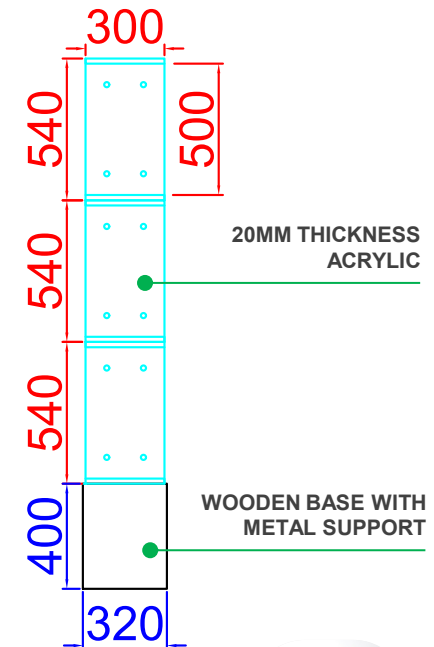


TOP VIEW

FIX WITH COACH BOLT

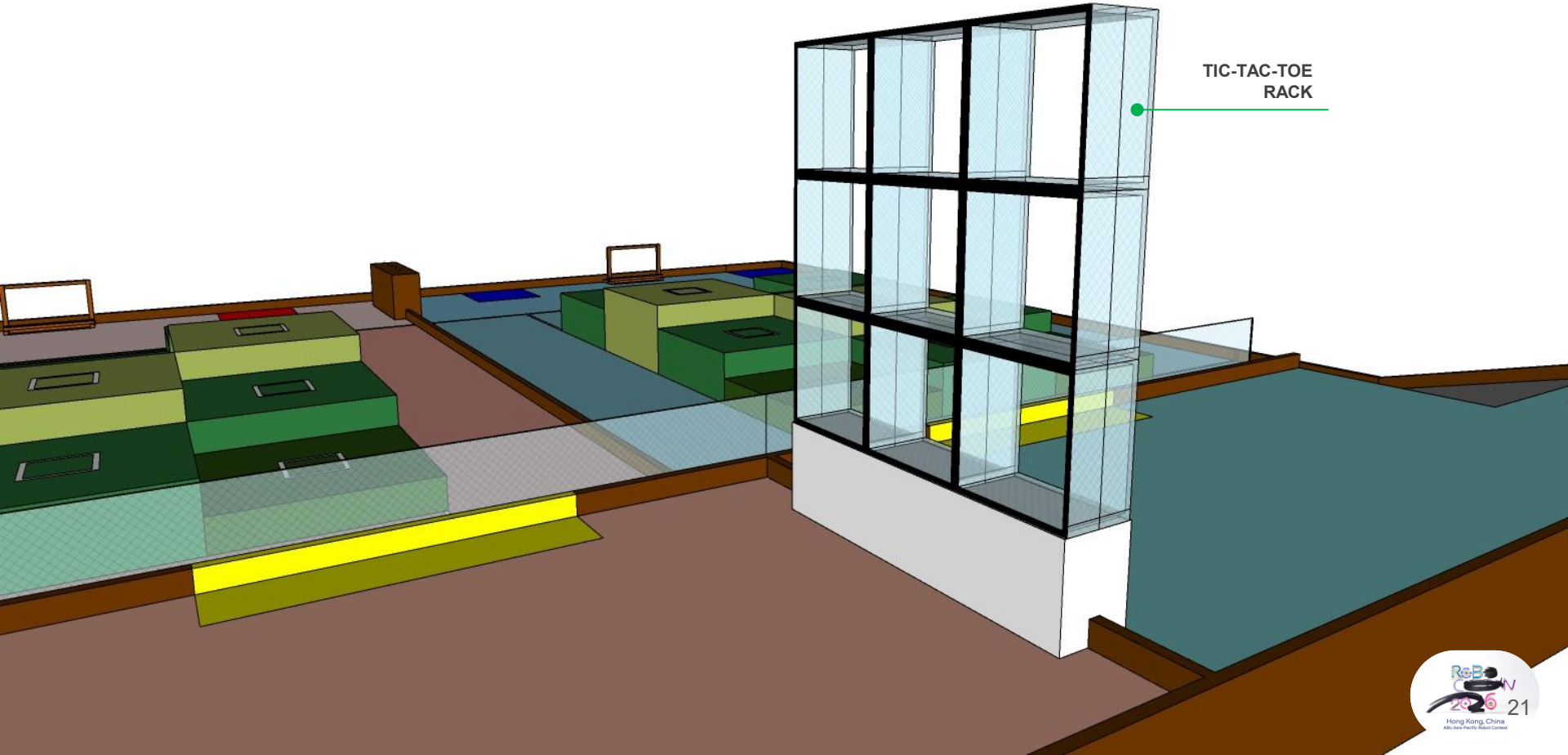


FRONT VIEW



SIDE VIEW

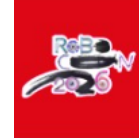
NOTE:
ALL DIMENSION IN MM.



TIC-TAC-TOE
RACK



*Picture for reference

R1 KFS**Dimension:** 350mm x 350mm x 350mm(±5%)**Material:** 3 layers Carton Box, cover by 6 sides of sticker**Weight:** 630g (±20%)*The same symbolic texts/pictures are sticked on 5 sides of the KFS for recognition, no images on the bottom surface.**R2 Real KFS****Dimension:** 350mm x 350mm x 350mm(±5%)**Material:** 3 layers Carton Box, cover by 6 sides of sticker**Weight:** 630g (±20%)*The same symbolic texts/pictures are sticked on 5 sides of the KFS for recognition, no images on the bottom surface.**R2 Fake KFS****Dimension:** 350mm x 350mm x 350mm(±5%)**Material:** 3 layers Carton Box, cover by 6 sides of sticker**Weight:** 630g (±20%)*Different symbolic texts/pictures are sticked on 5 sides of the KFS for recognition, no images on the bottom surface. A ribbon will be applied on the bottom surface. A red ribbon will be applied on Blue team's Fake KFS, and vice versa.

Red



Blue



Red



Blue

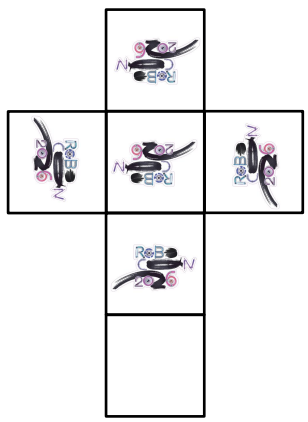


Red



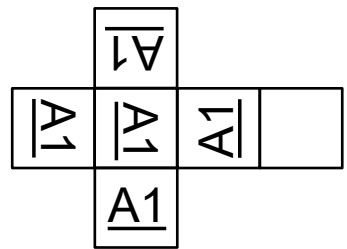
Blue

R1



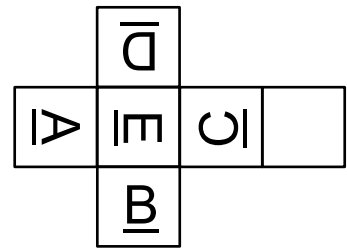
R1 Pattern Orientation

R2 Real	A	B	C	D	E
1					
2					
3					



Real Pattern Orientation
(Example: A1)

R2 Fake	A	B	C	D	E
Set 1					
Set 2					
Set 3					



Fake Pattern Orientation

*Picture for reference