



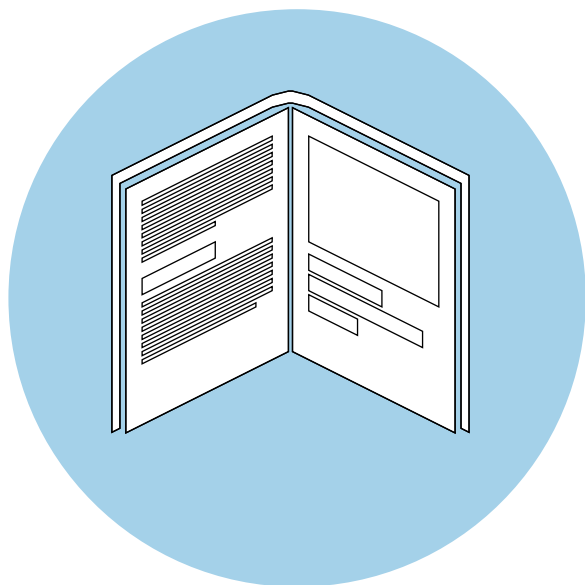
SELFMAKERS

MANUALS & FRAMEWORKS
FOR REFUGEE WORKSHOPS

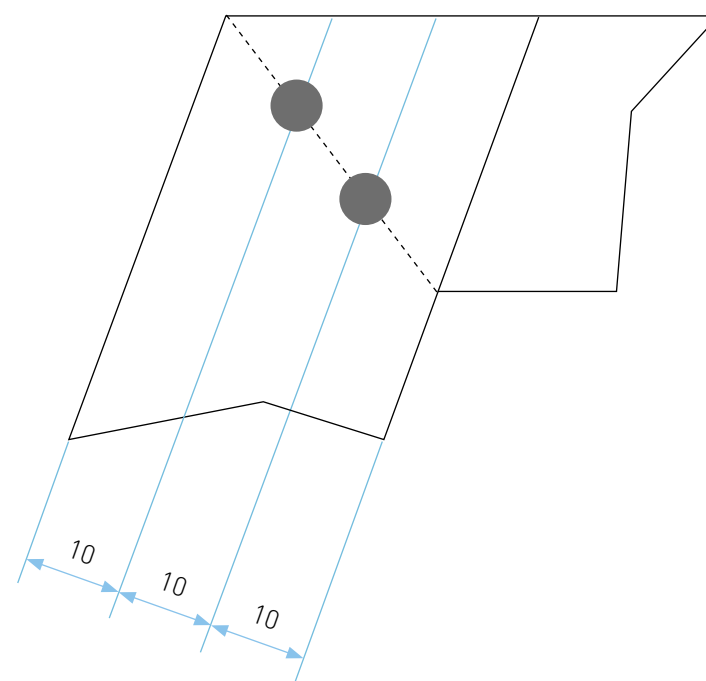
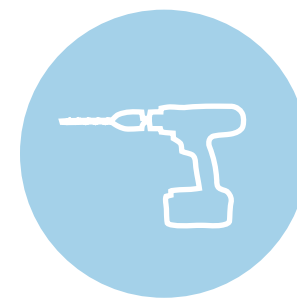
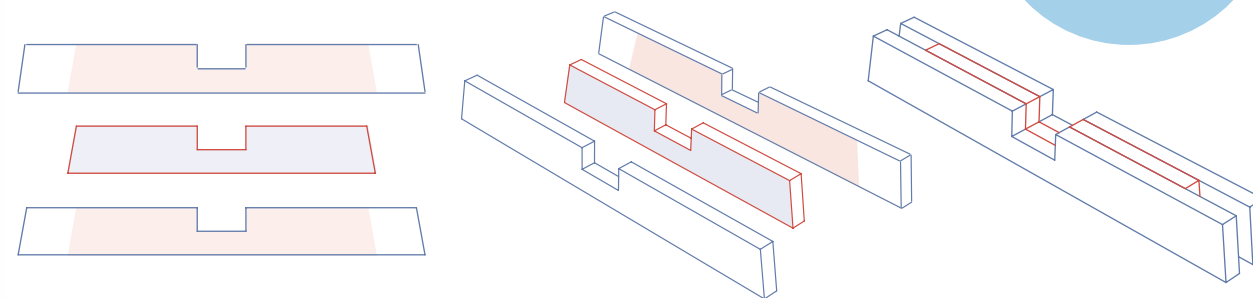
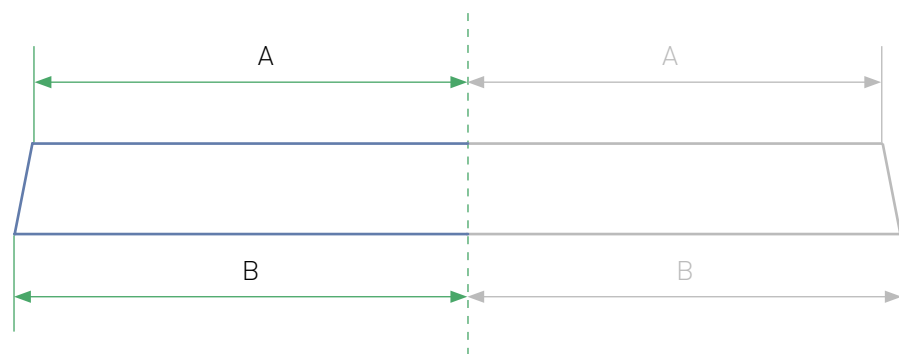
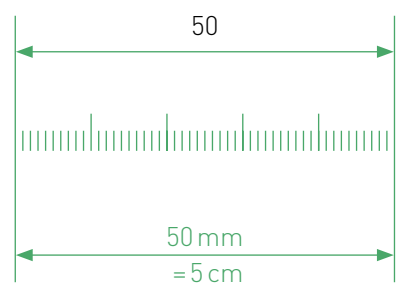
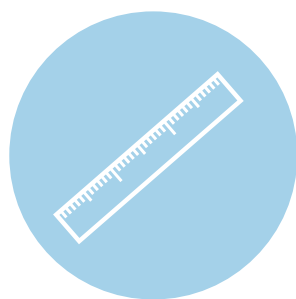
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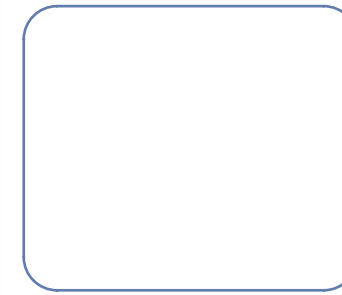
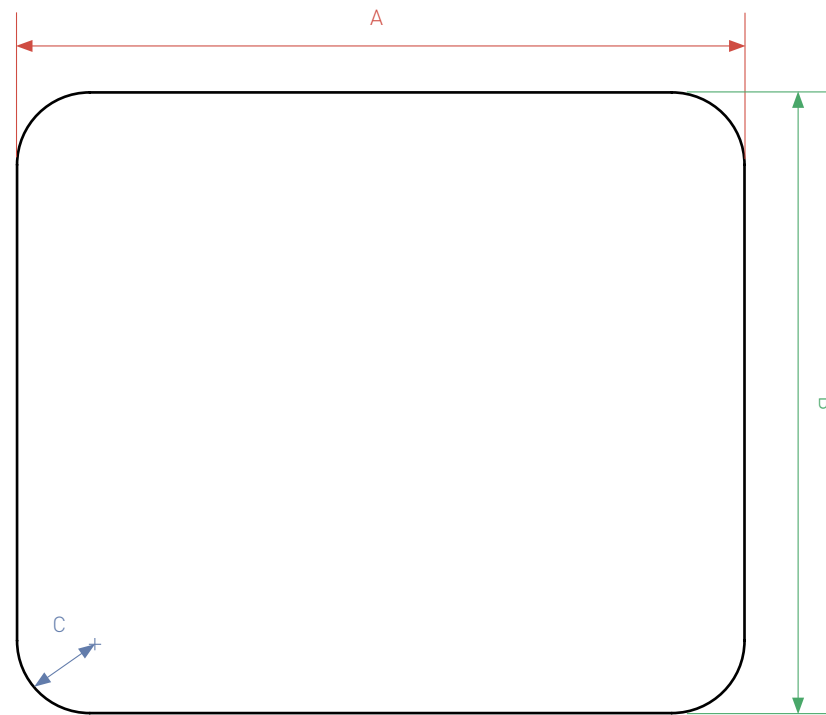
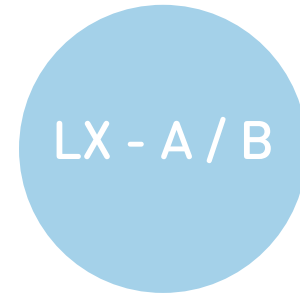
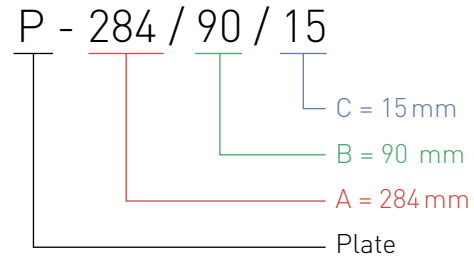
BASICS	1
TOOLBOX	5
STOOL Nº1	5
SHELF Nº1	13
TRANSFORMATION	21
FURNITURE	25
STOOL Nº1	25
P-330/300/35	27
P-270/90/8	28
L3-270/5/-5-FF	29
L3-360/5/5 - MF	30
B3-310/5/-5	31
E3-54/5/5-M	32
SHELF Nº1	33
P-1140/300/35	35
L1-1196-FF	36
L3-1167/3/3-FF	37
L3-260/3/-3-MM	39
L3-150/3/-3-MM	40
E3-54/3/3-M	41

MODULES	43
B(Beam),B1	43
B2,B3	44
L(Link)	45
L1	46
L2	47
L3	48
E(Ending)	49
E1	50
E2	51
E3	52
X(Cut),X1,X2	53
X3,X4	54
P(Plate)	55
C(Connection),C1,C2	56
Workshop	57
Organisation	59
Equipment+Material	61
Communication	63



BASICS





P Plate



C1



C2

C Connection



B1



L1



E1



B2



L2



E2



B3



L3



E3

B Beam

L Link

E Ending

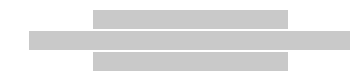


X1



X2

X Cut



MM

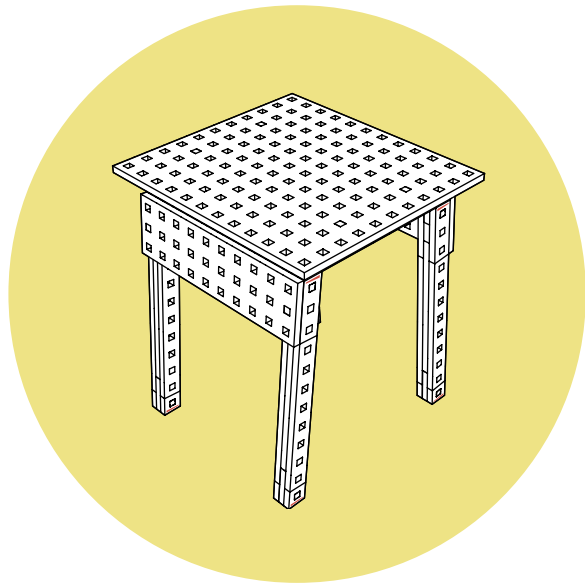


MF

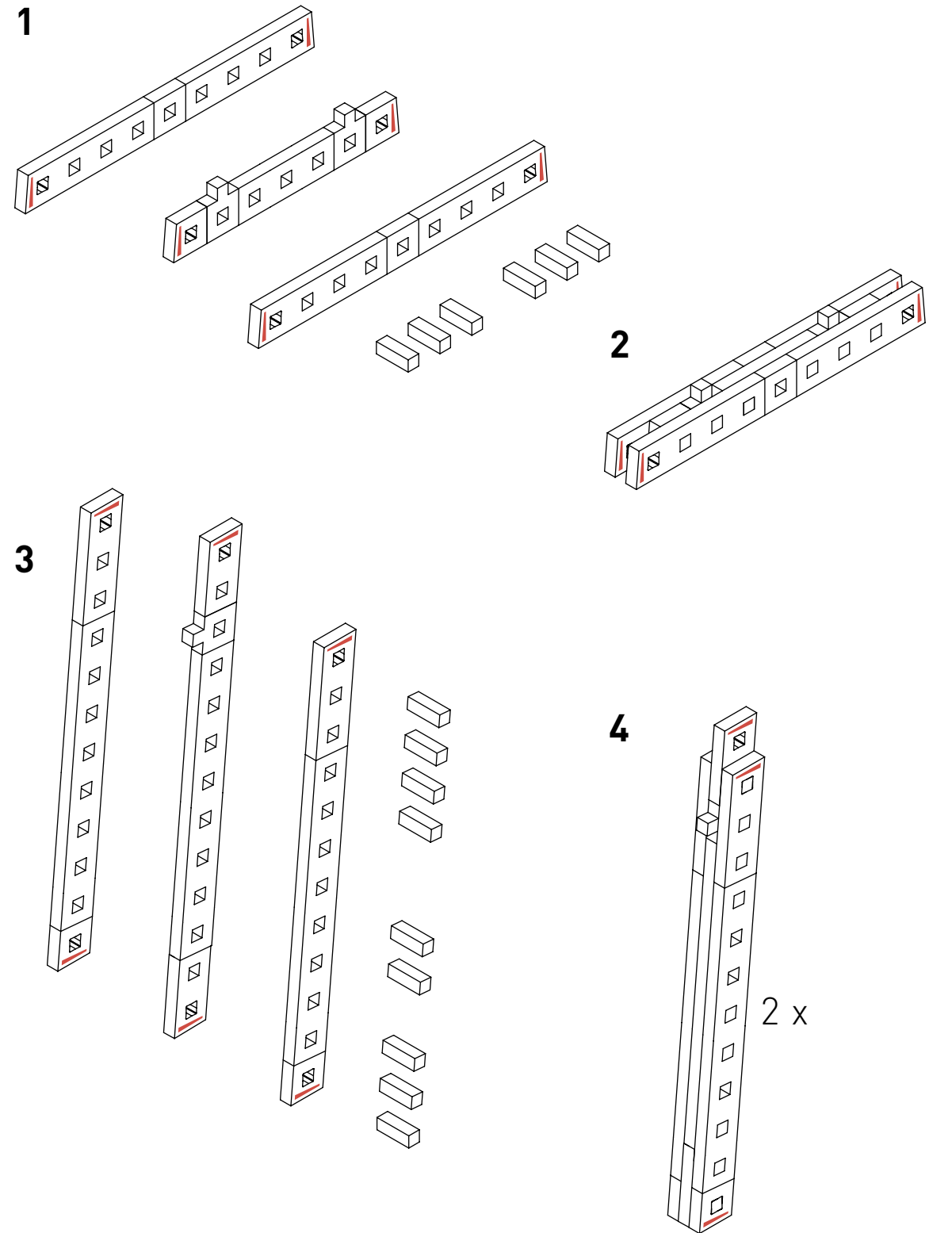
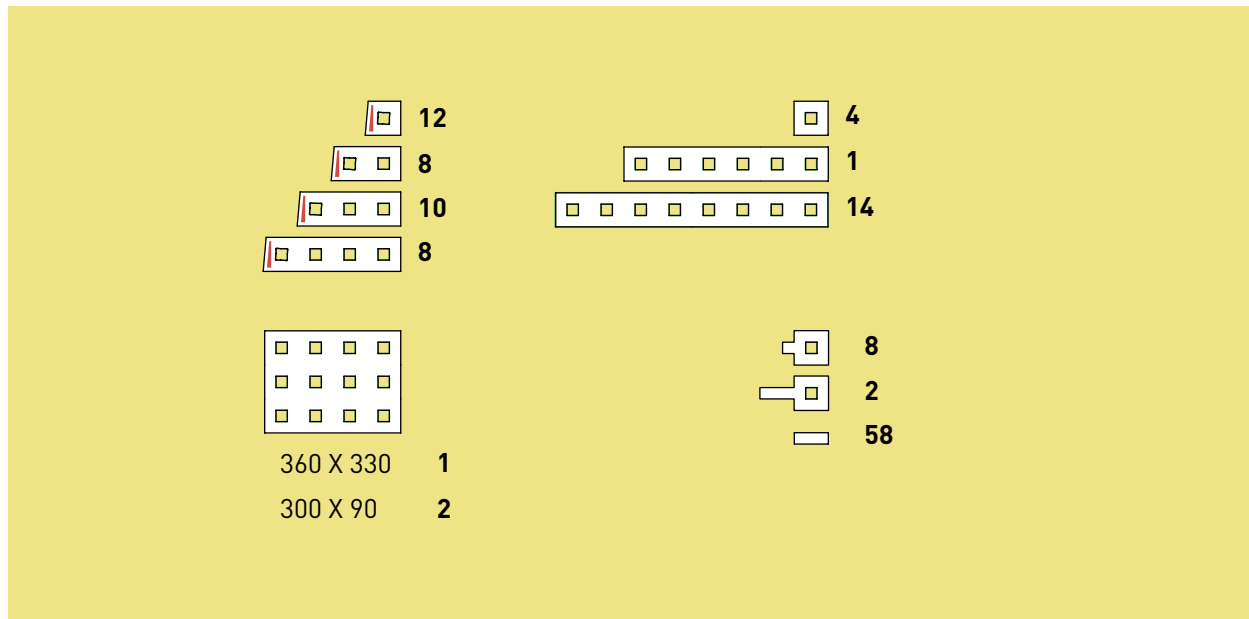


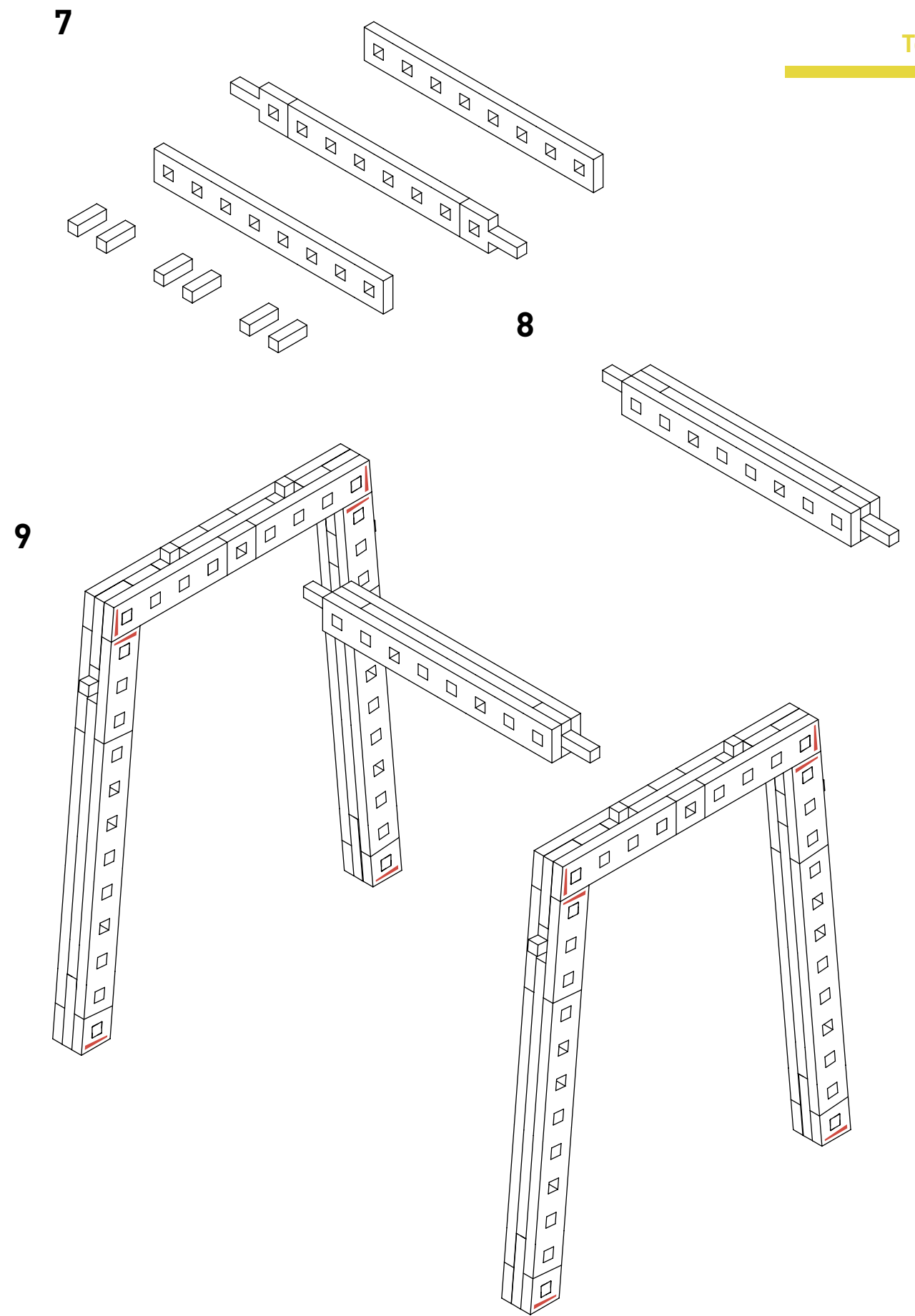
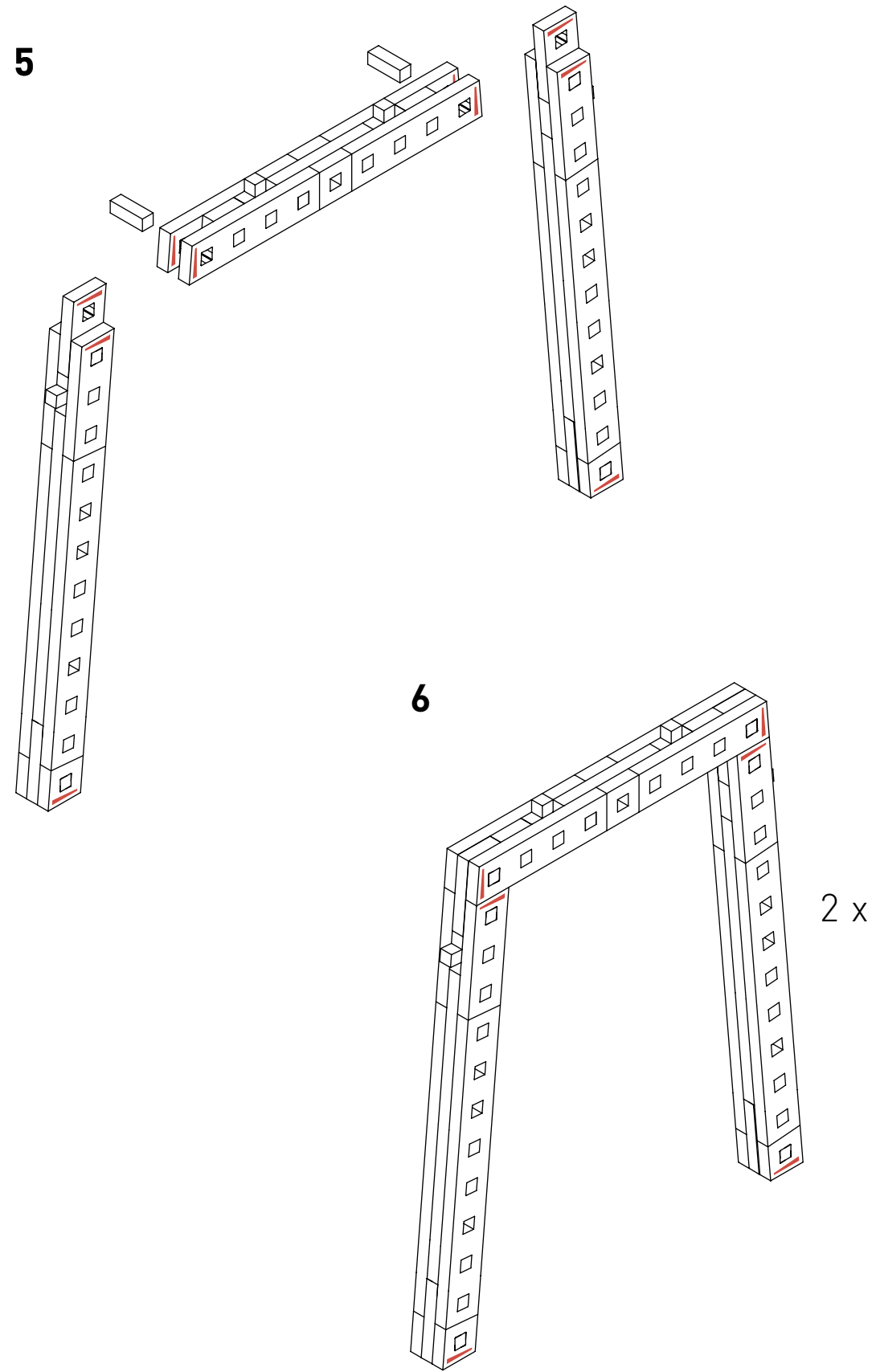
FF

Male / Female

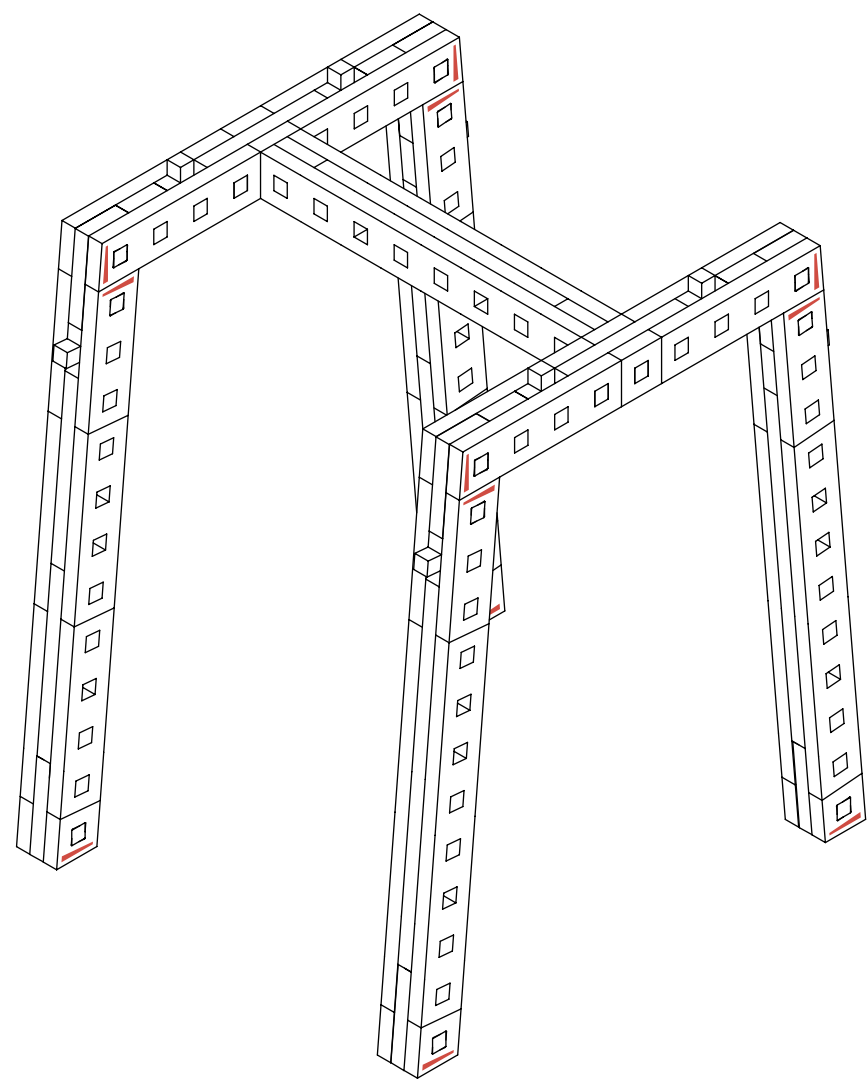


STOOL Nº 1

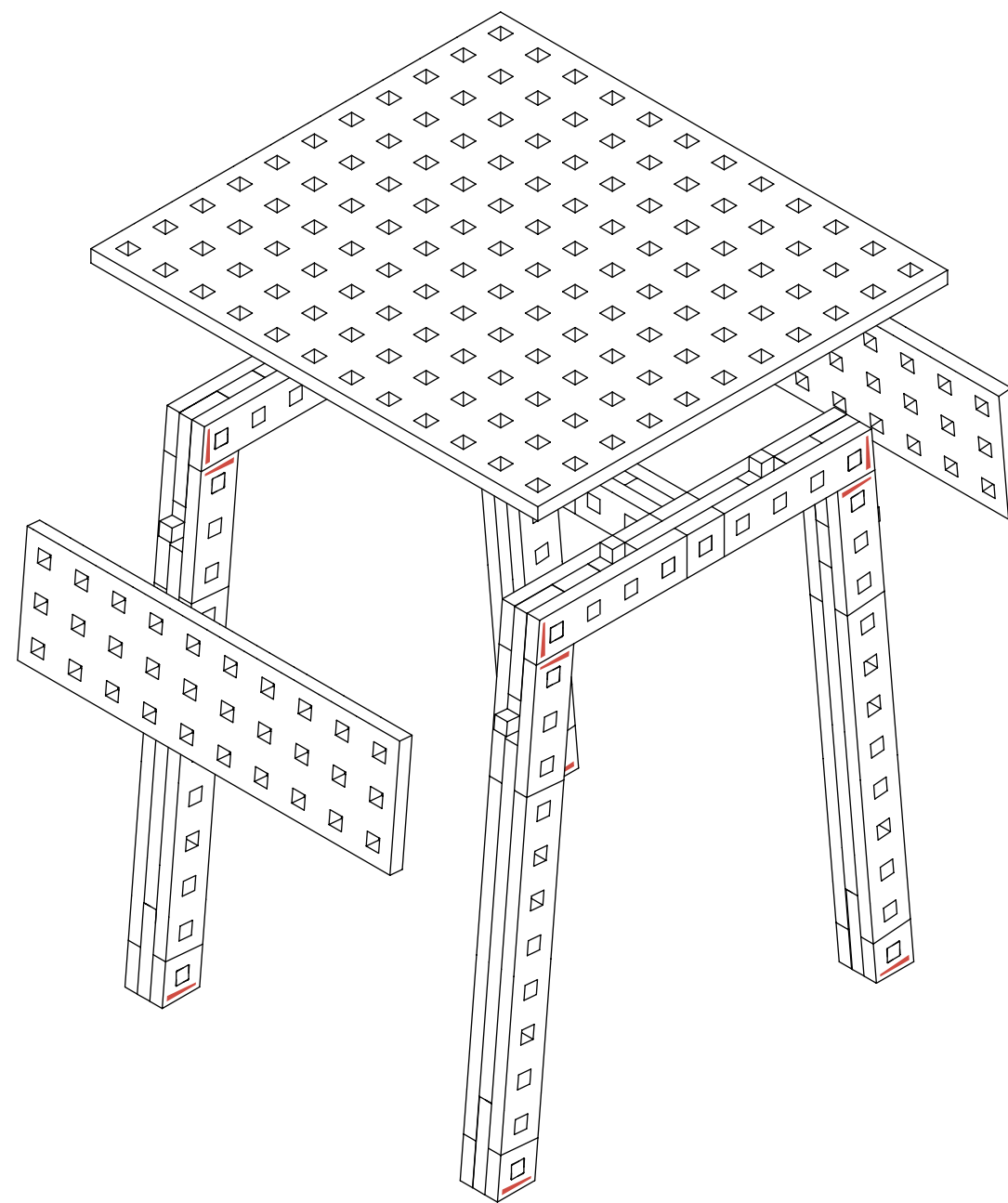




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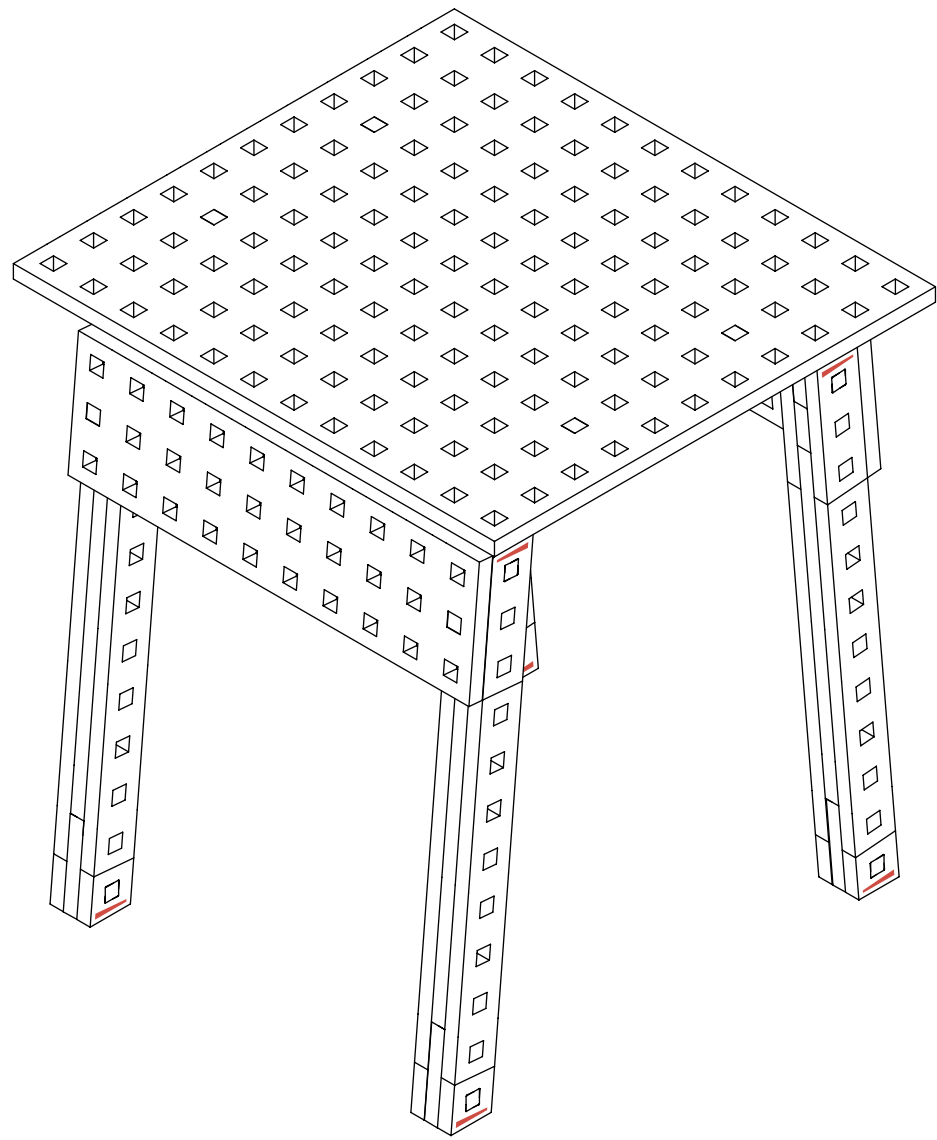


11



STOOL №1

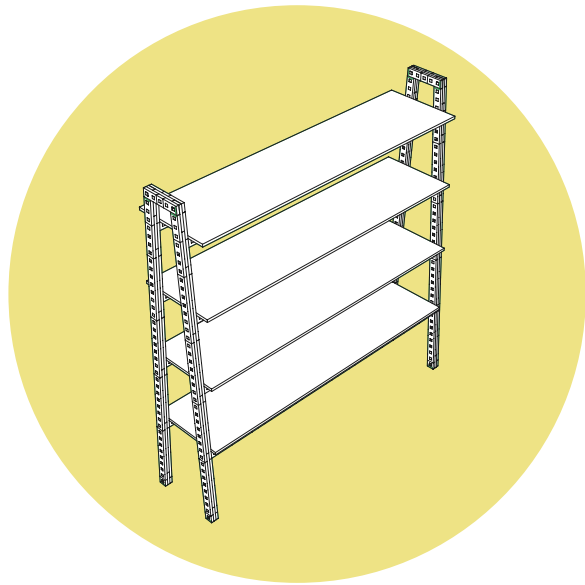
12



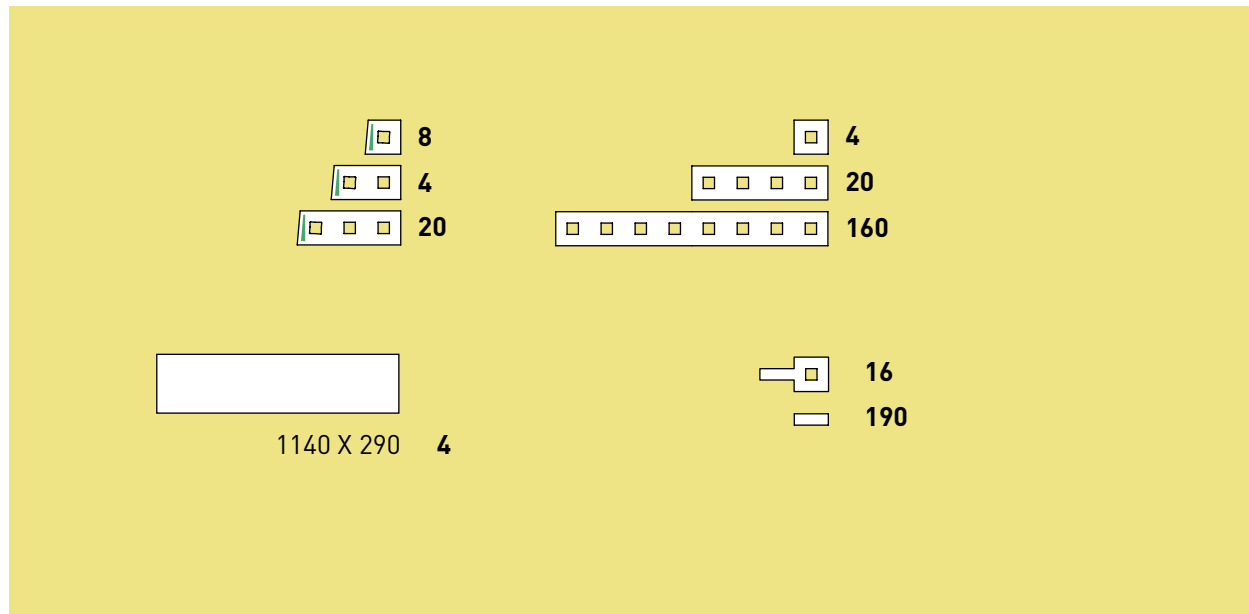
Toolbox

STOOL №1

SHELF Nº 1

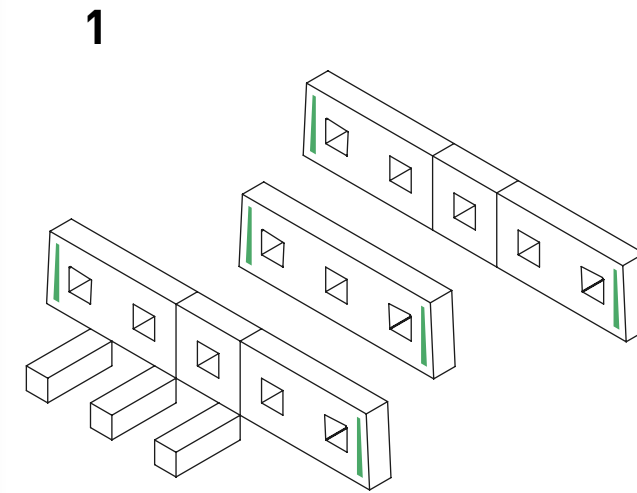


SHELF Nº 1

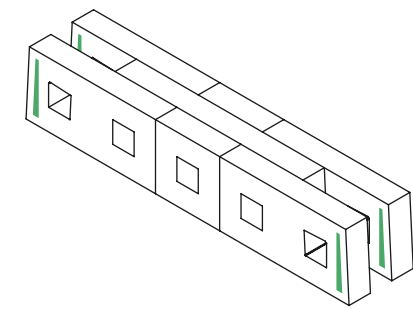


Toolbox

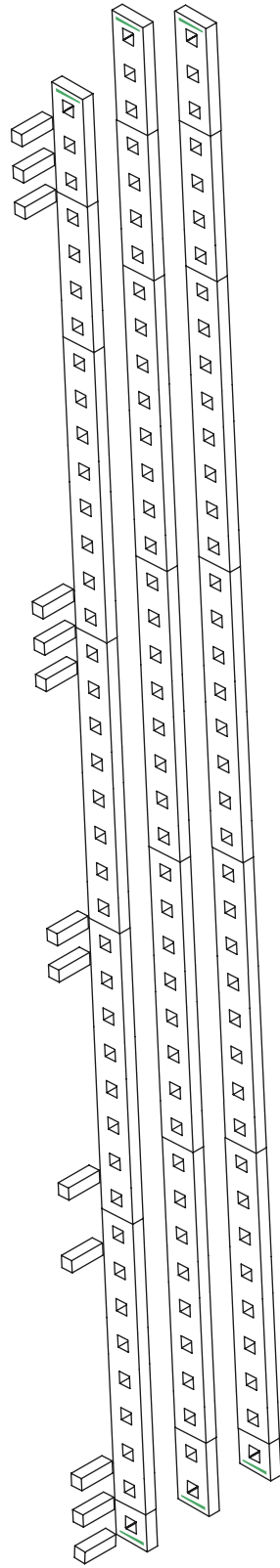
SHELF Nº 1



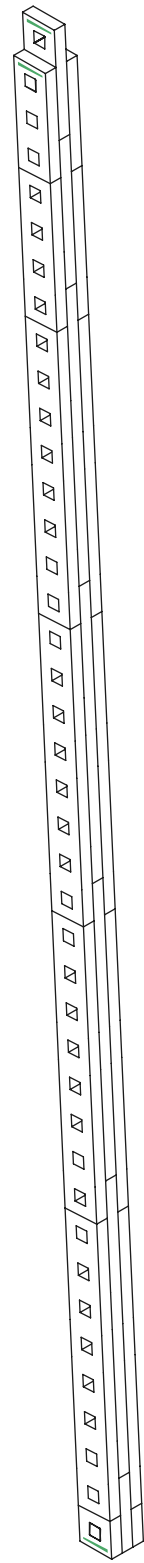
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3

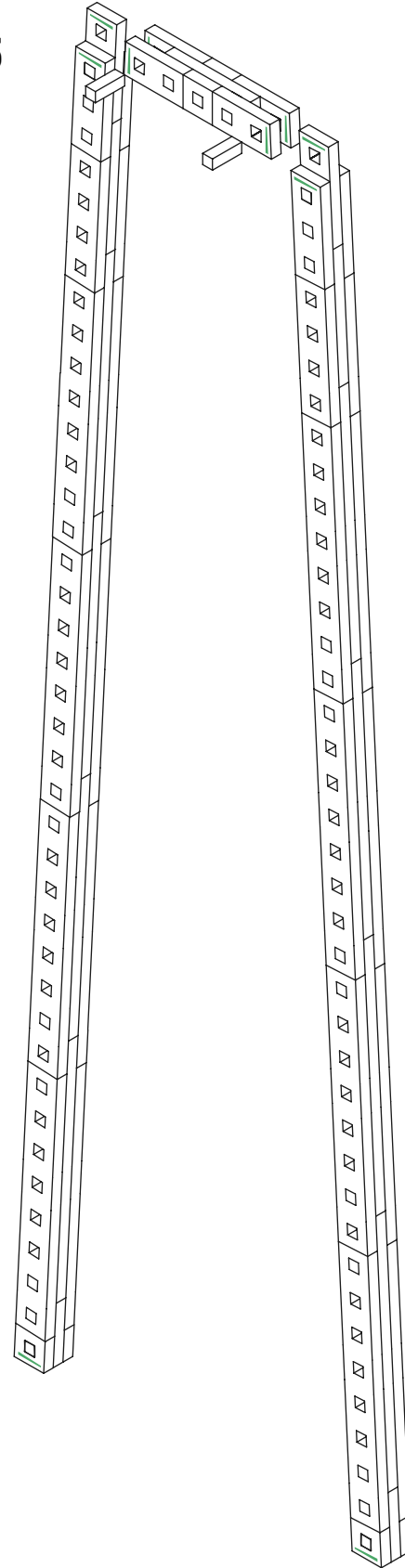


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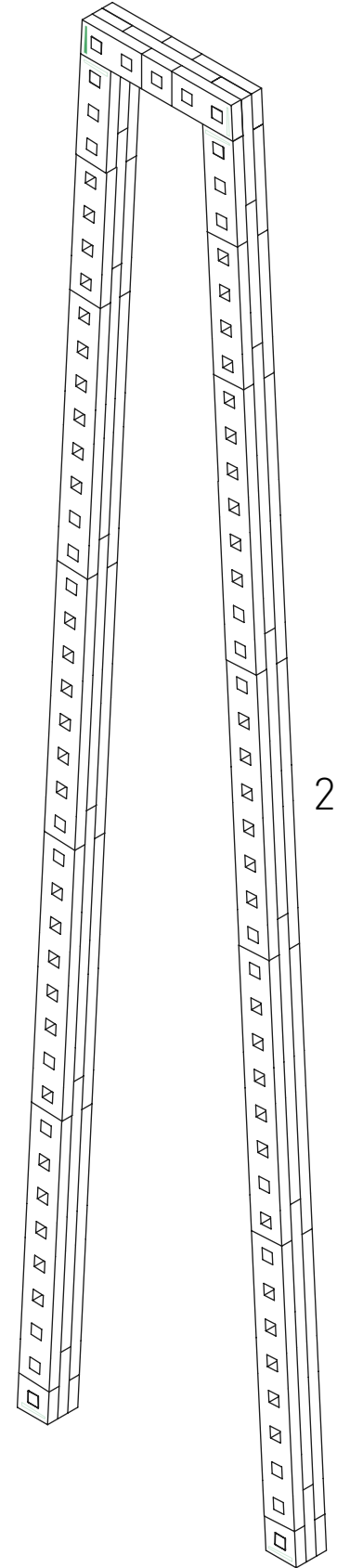


2 x

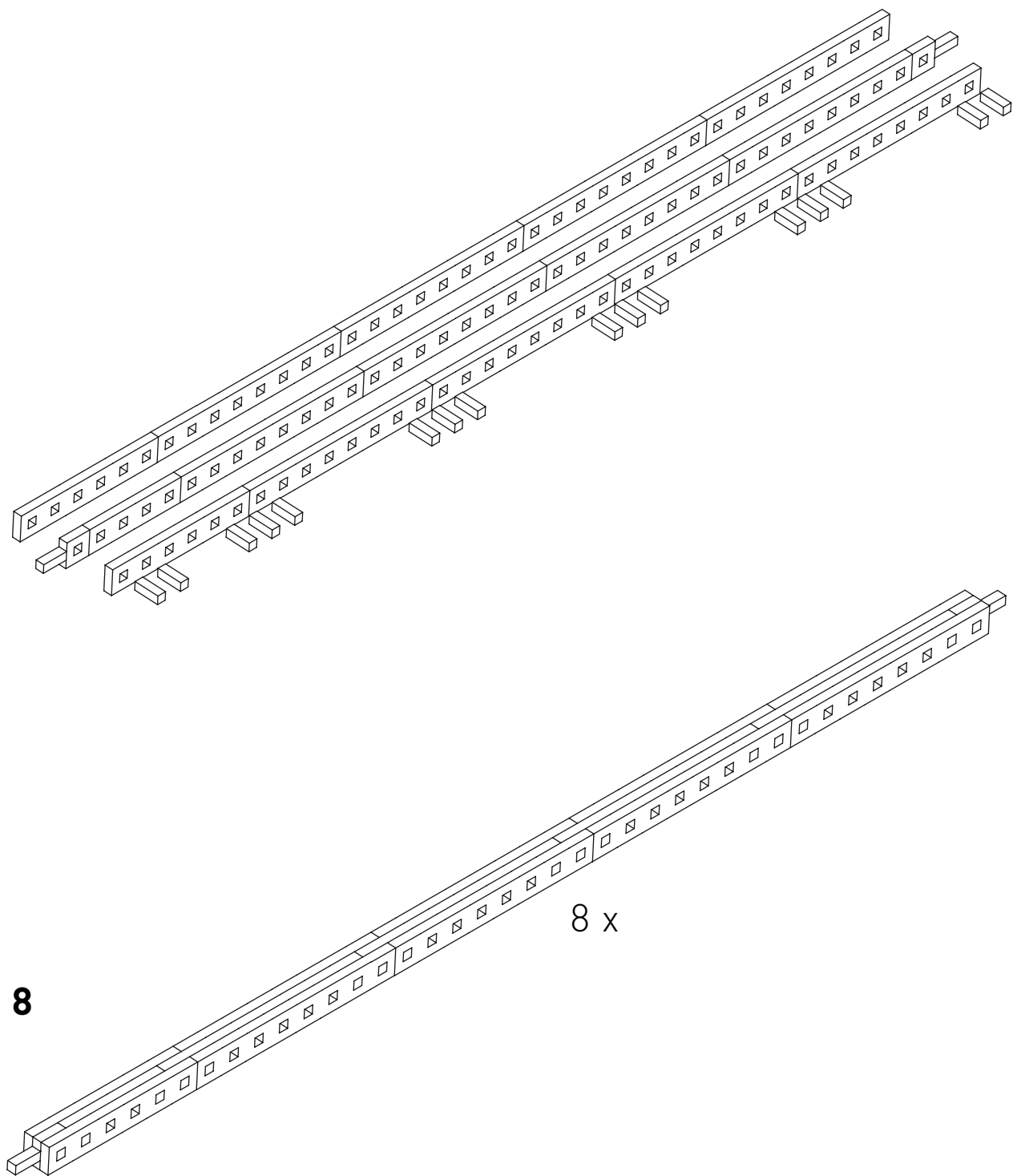
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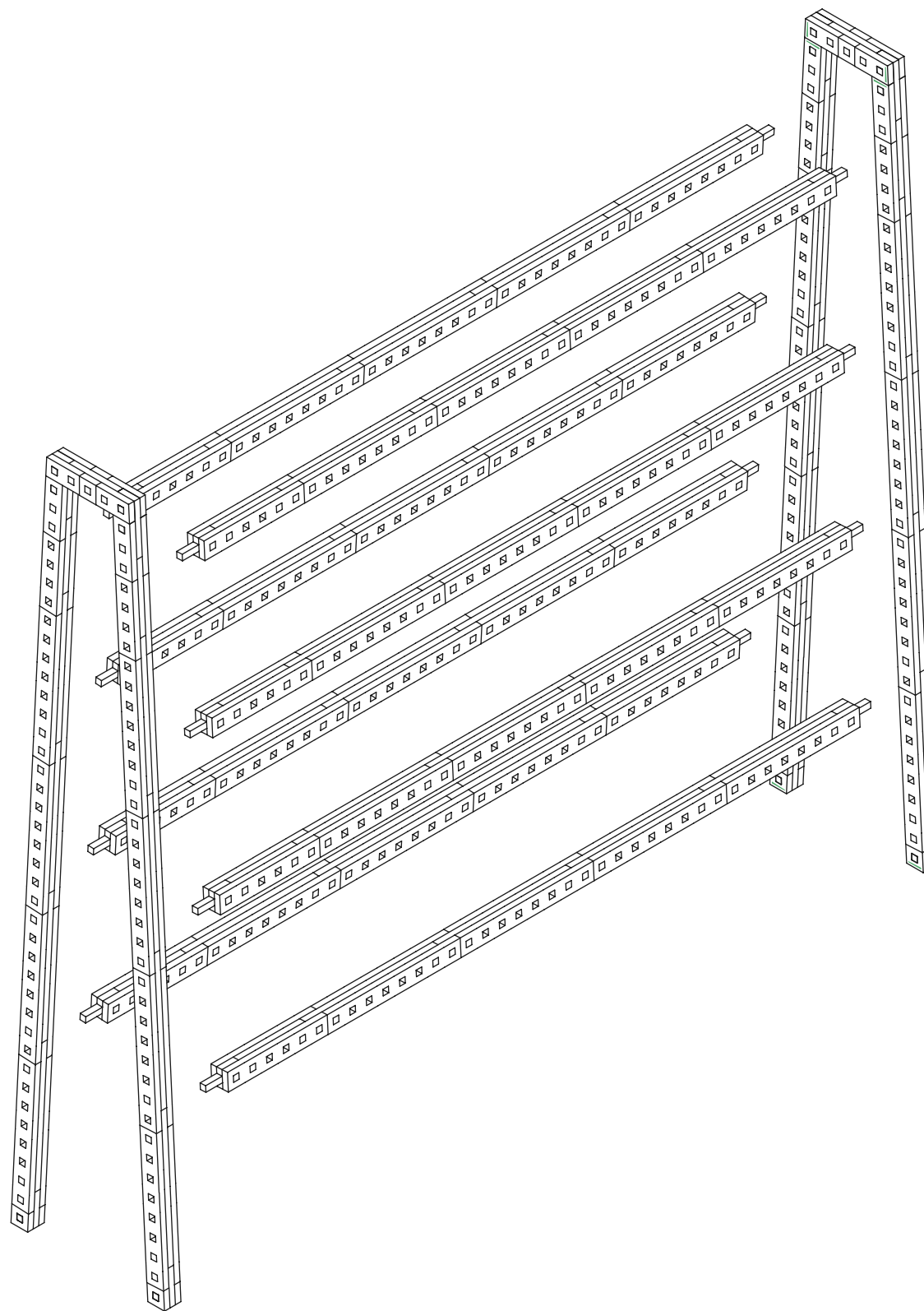
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2 x

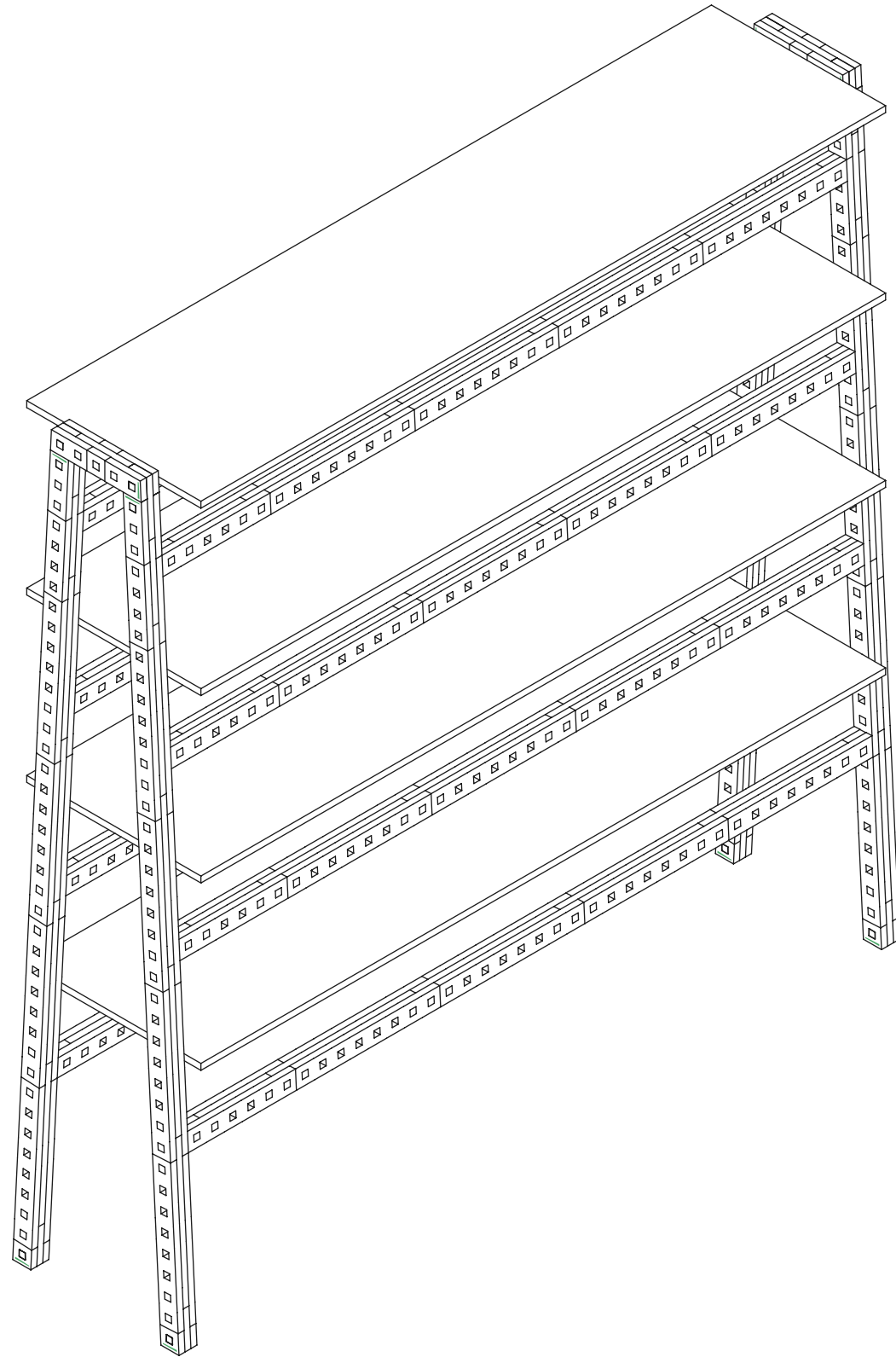


9

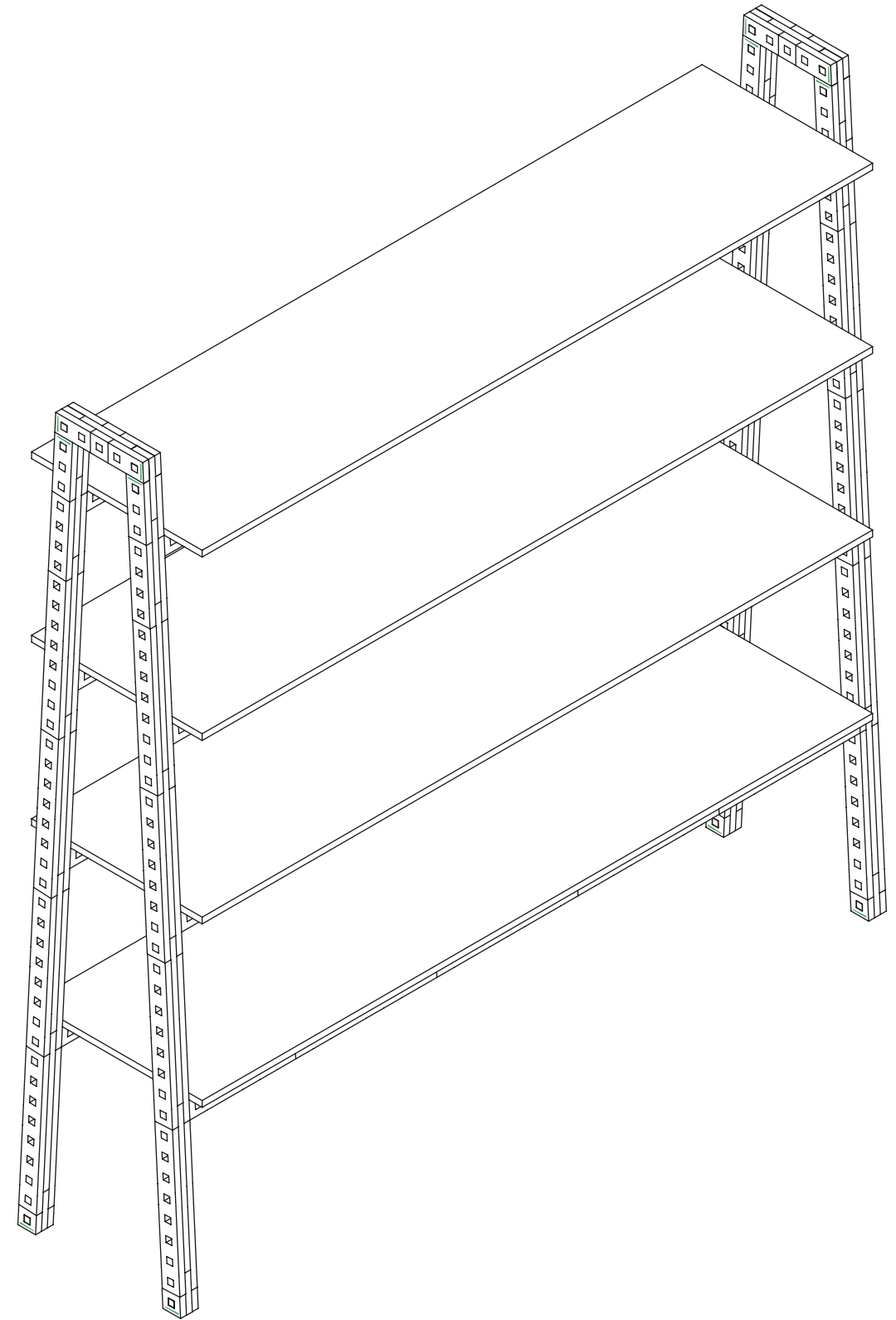


SHELF № 1

10



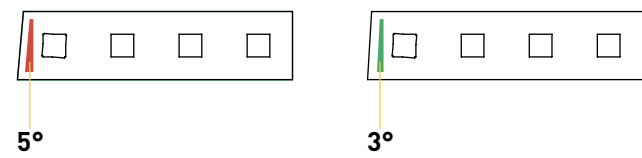
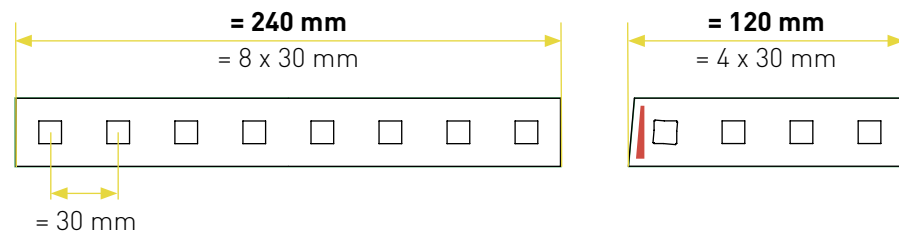
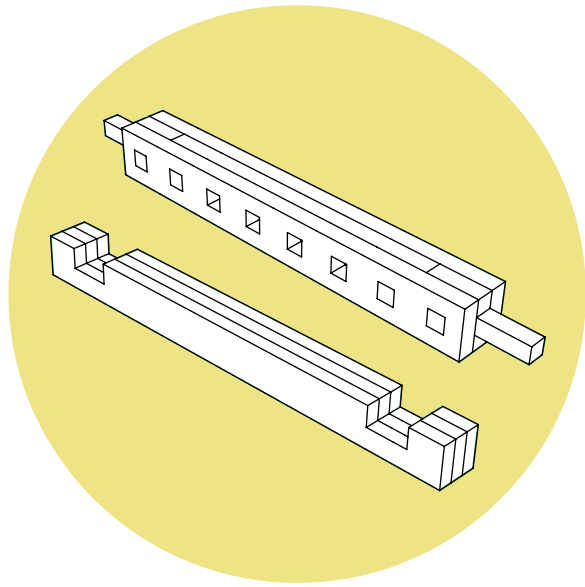
11



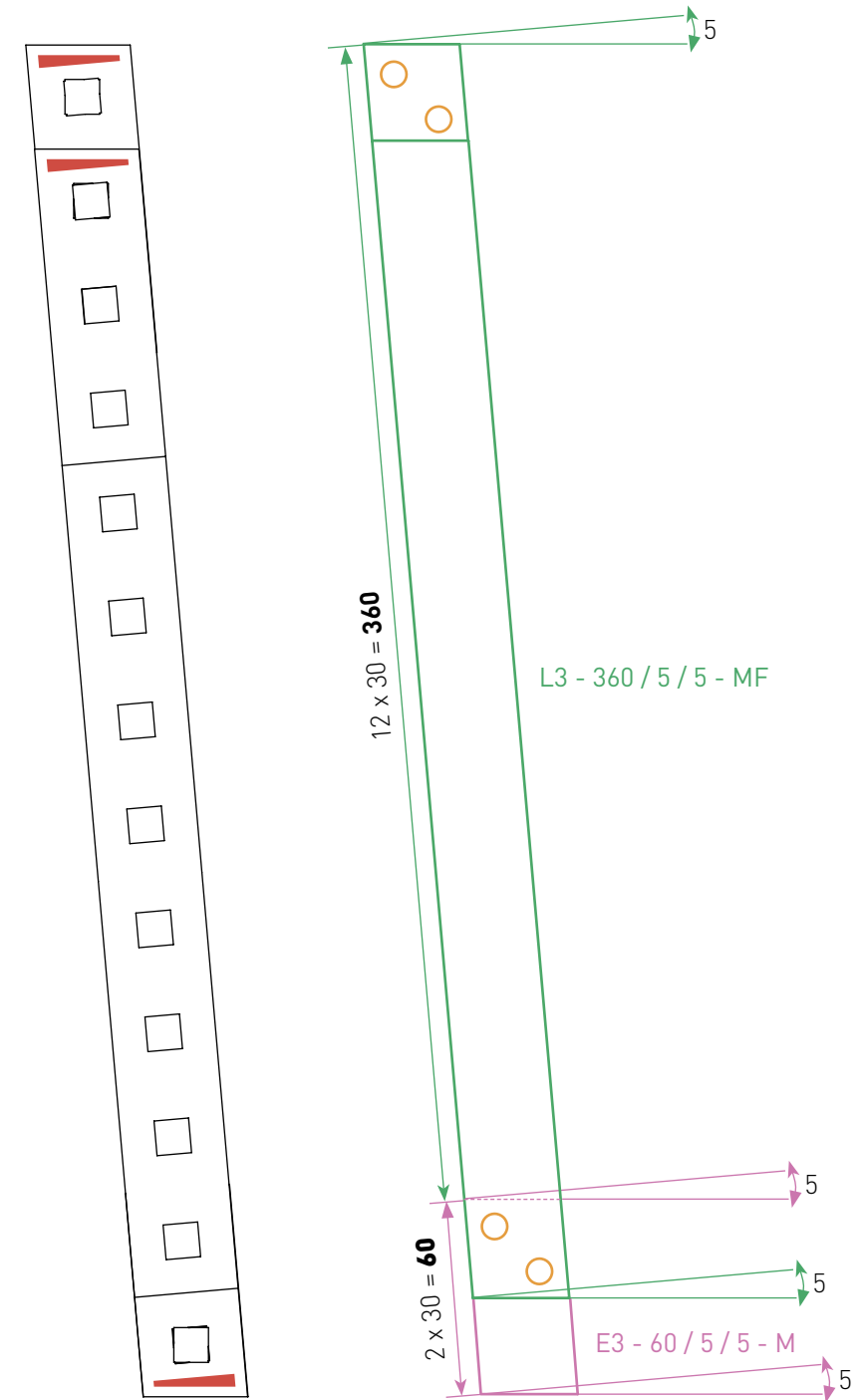
Toolbox

SHELF № 1

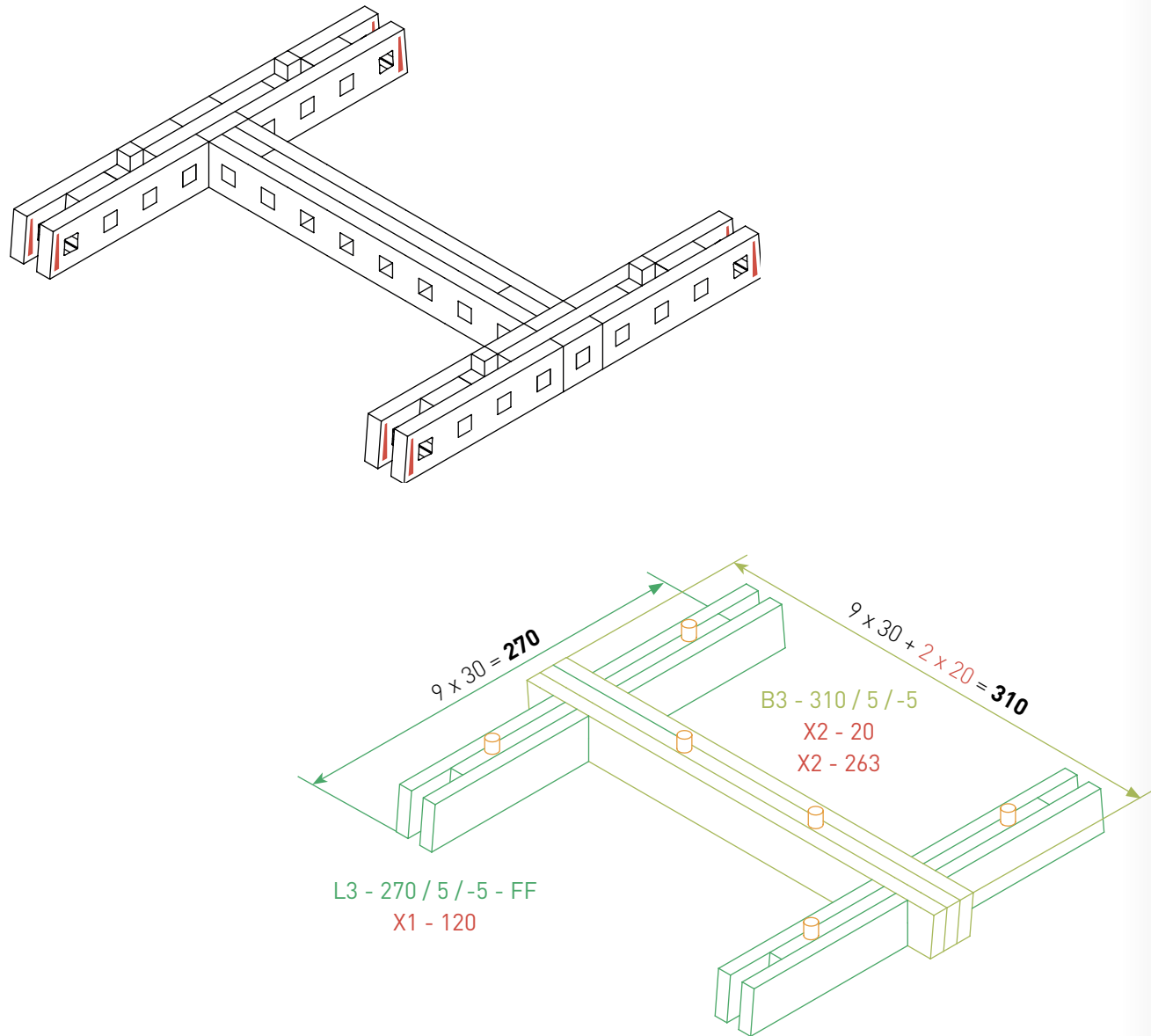
TRANSFORMATION



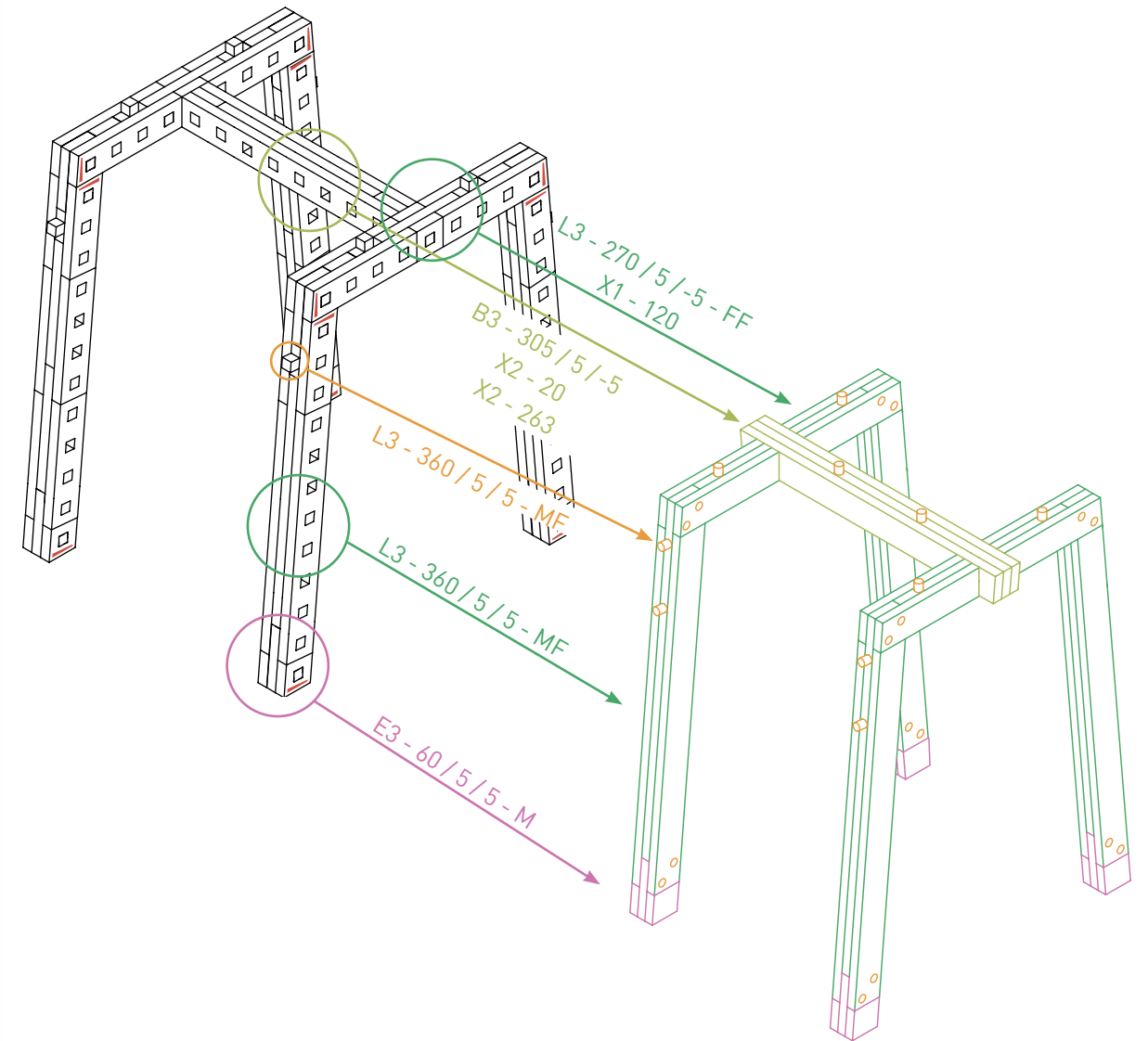
EXAMPLE

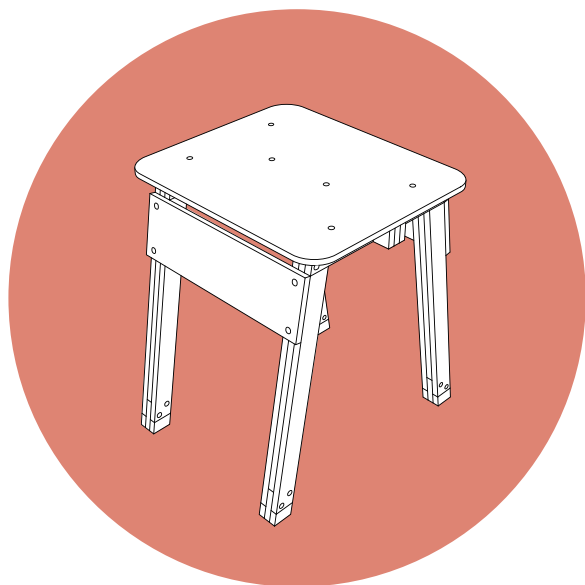


EXAMPLE







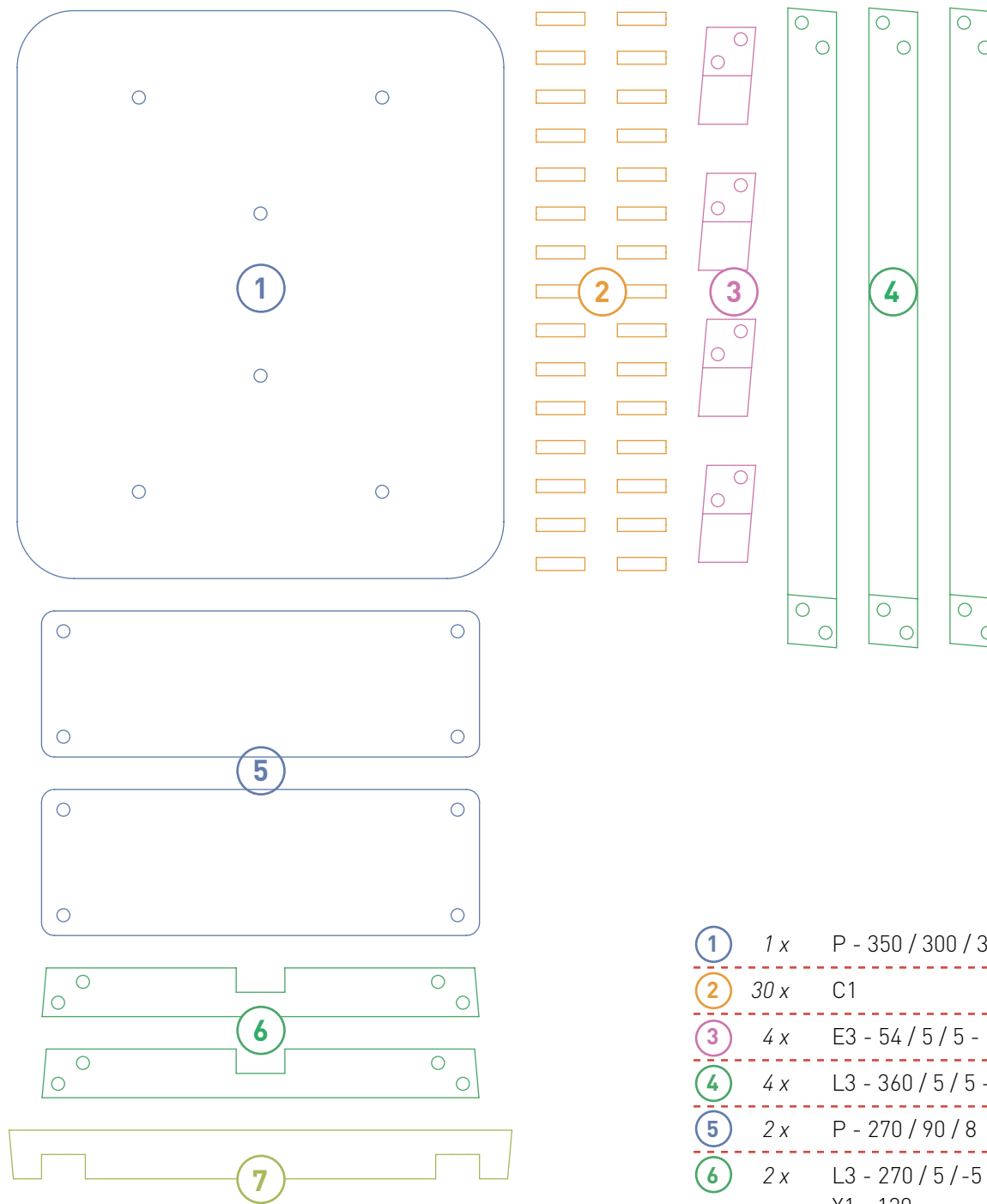
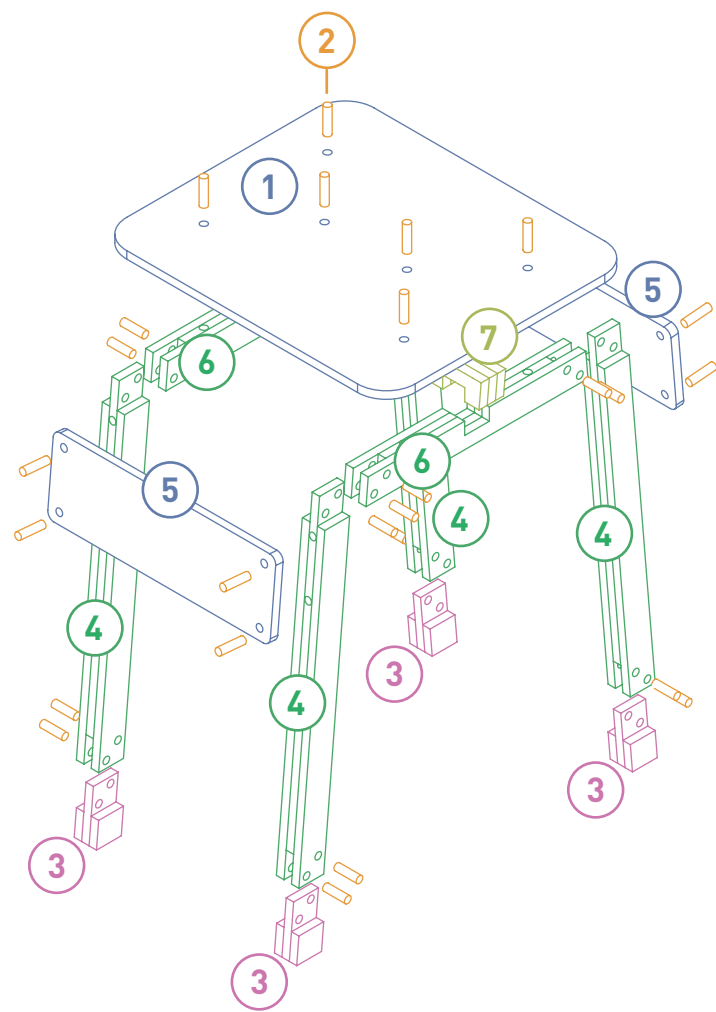
EXAMPLE












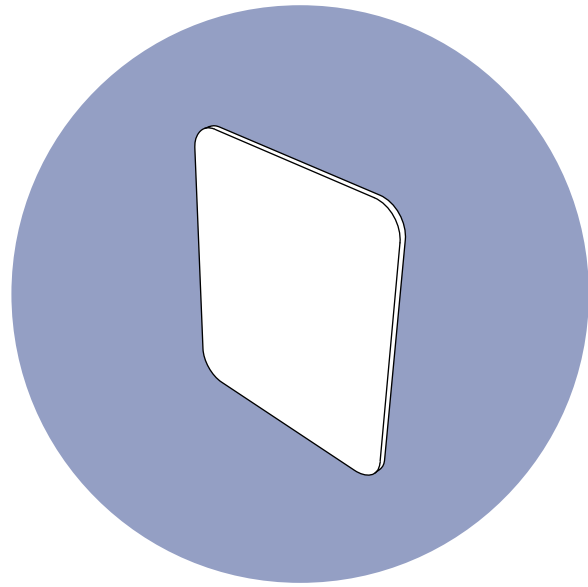
STOOL №1

-  wood plate [350 mm x 300 mm]
-  wood plate [270 mm x 90 mm] x 2
-  wood plank [9 mm x 27 mm x 7250 mm]
-  30 dowels
-  handsaw
-  hammer
-  drill
-  wood glue

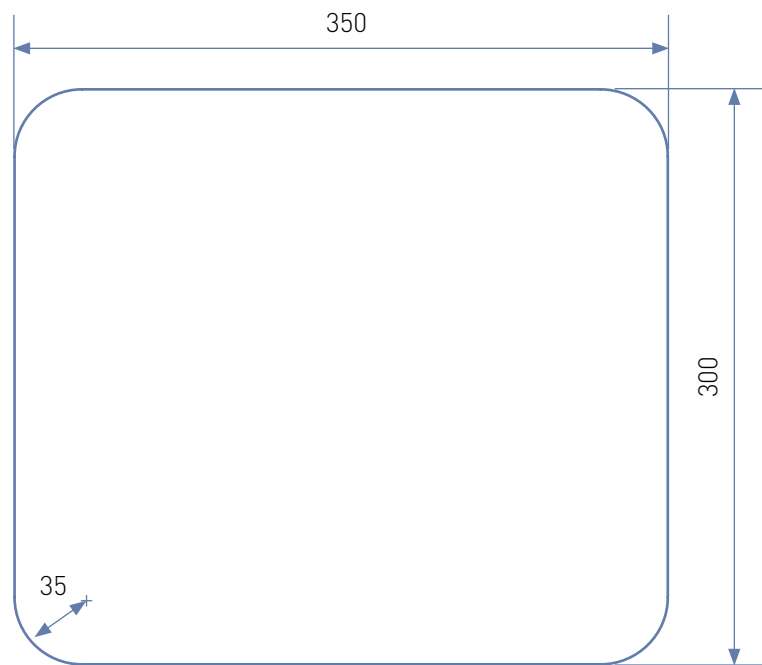


-  1 x P - 350 / 300 / 35
-  30 x C1
-  4 x E3 - 54 / 5 / 5 - M
-  4 x L3 - 360 / 5 / 5 - MF
-  2 x P - 270 / 90 / 8
-  2 x L3 - 270 / 5 / -5 - FF
X1 - 120
-  1 x B3 - 310 / 5 / -5
X2 - 20
X2 - 263

STOOL № 1

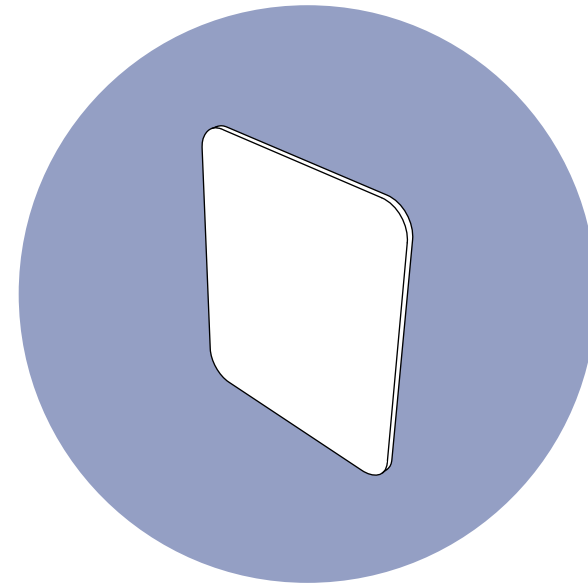


P - 330 / 300 / 35

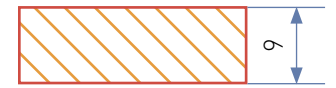


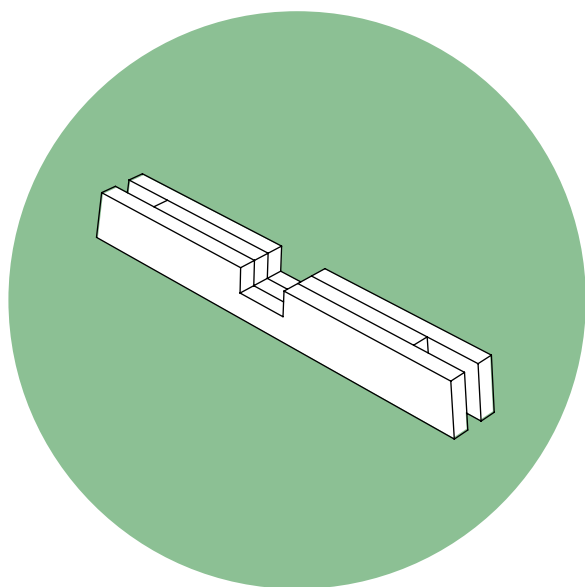
Furniture

STOOL № 1

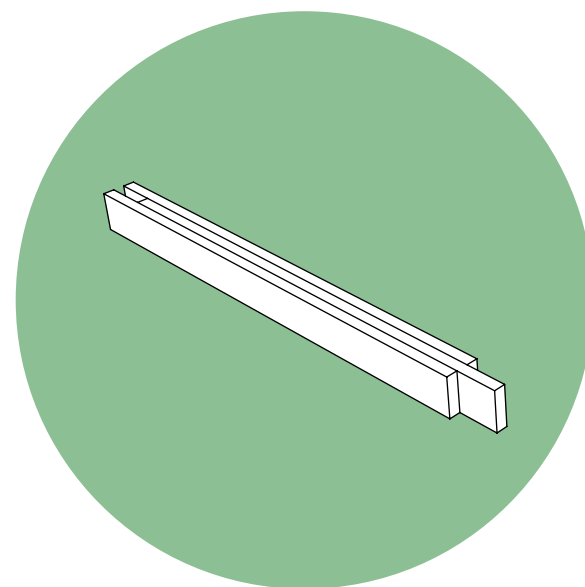
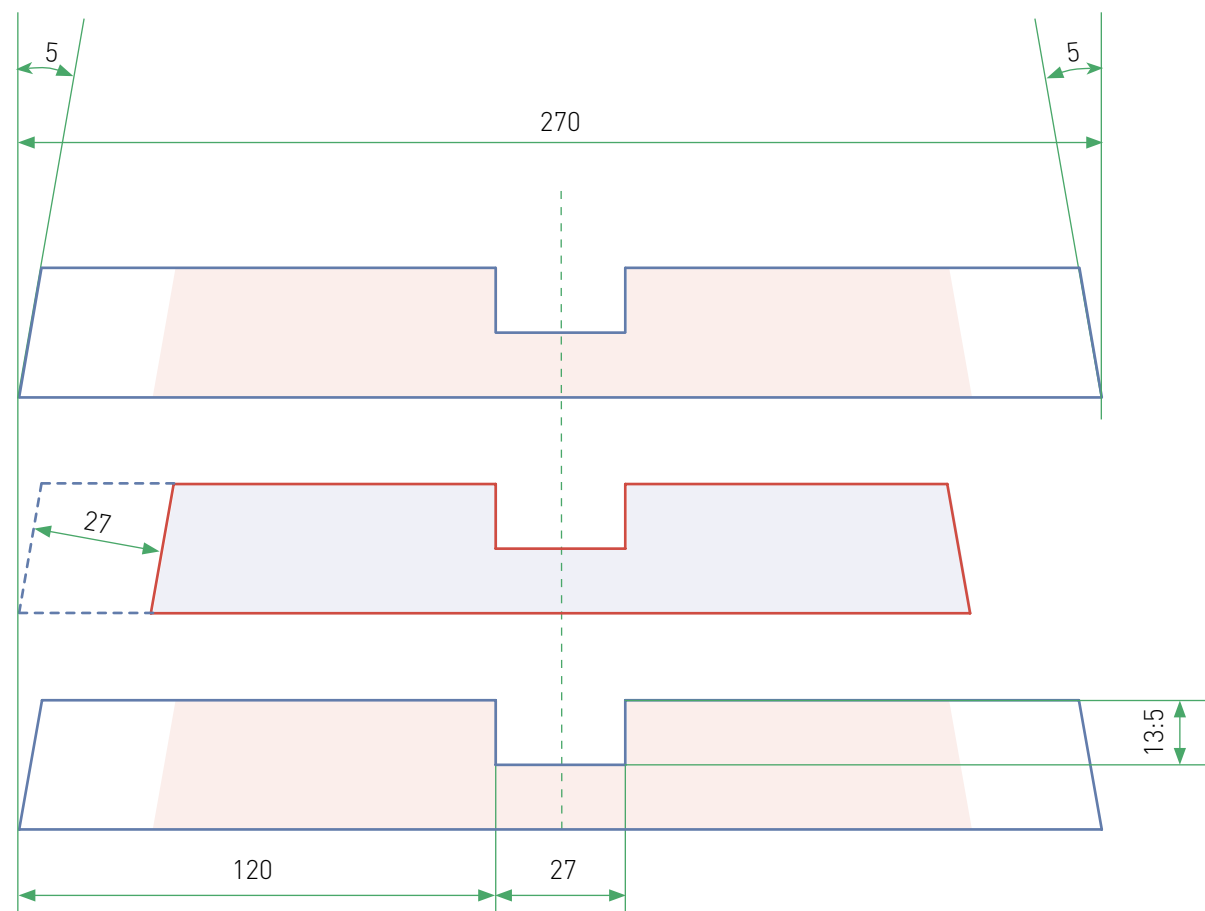
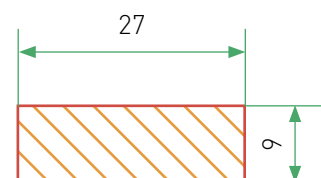


P - 270 / 90 / 8

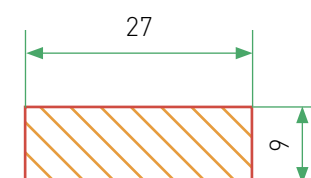


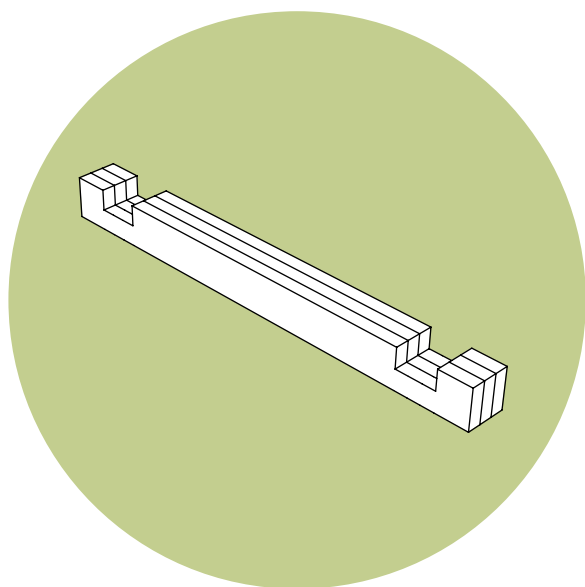


L3 - 270 / 5 / -5 - FF
X1 - 120

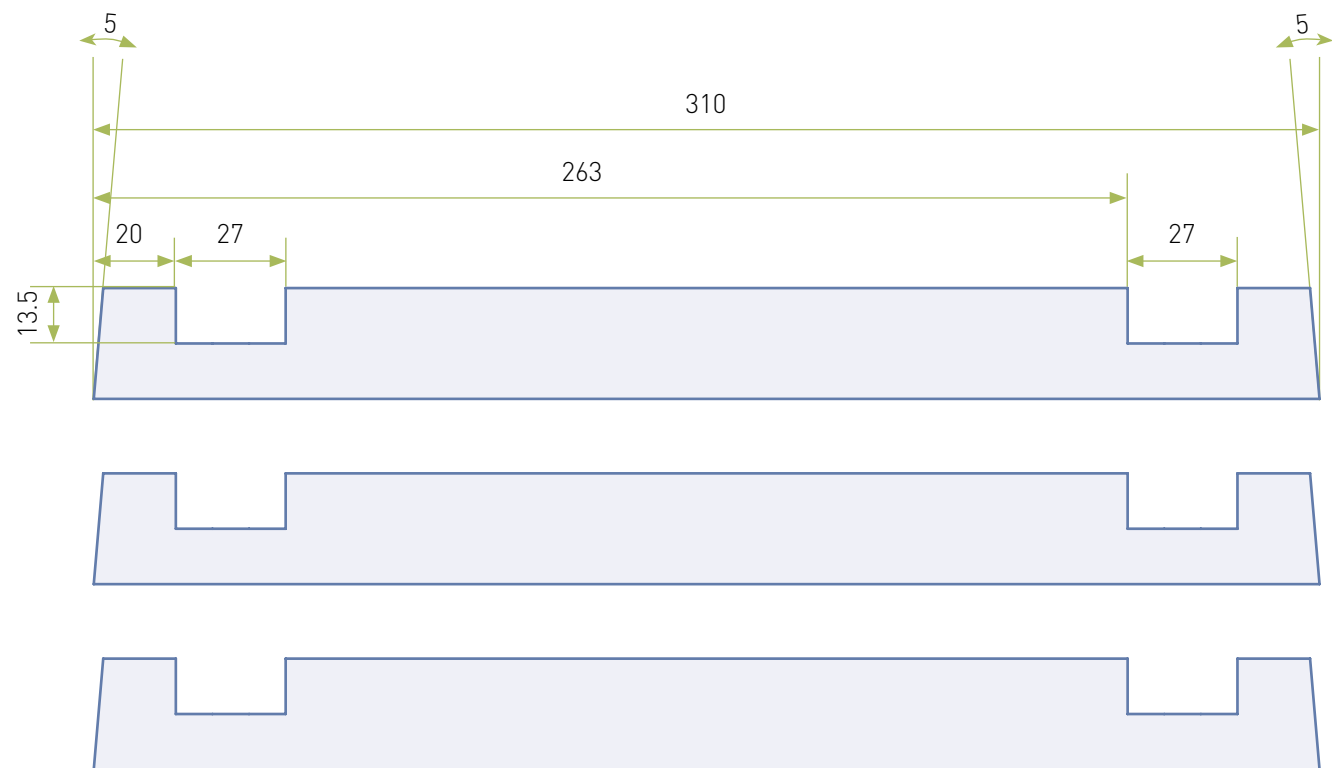
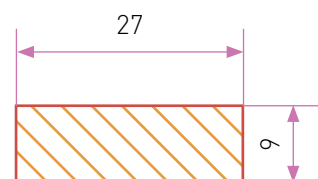


L3 - 360 / 5 / 5 - MF

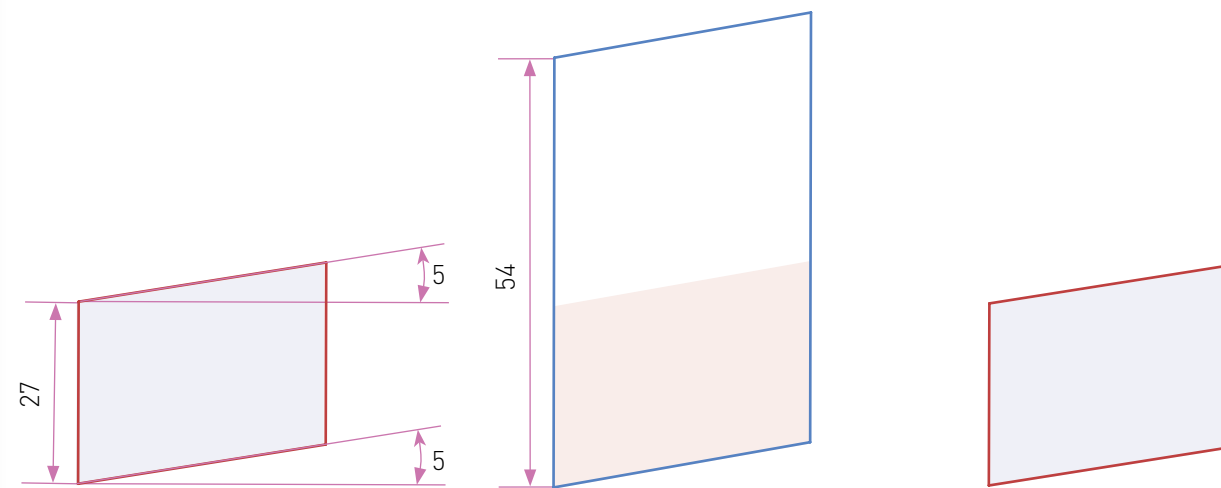
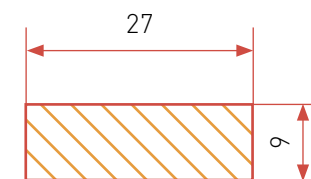
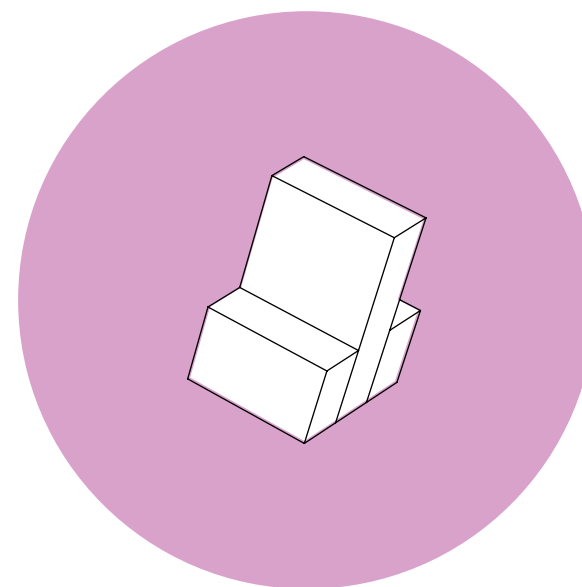


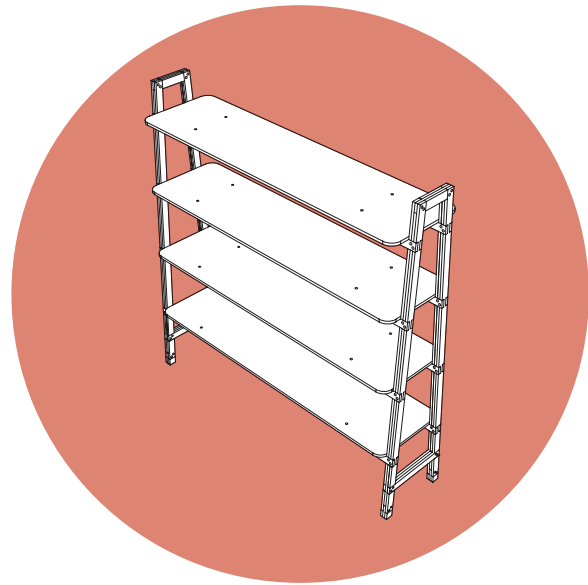


B3 - 310 / 5 / -5
X2 - 20 **X2** - 263










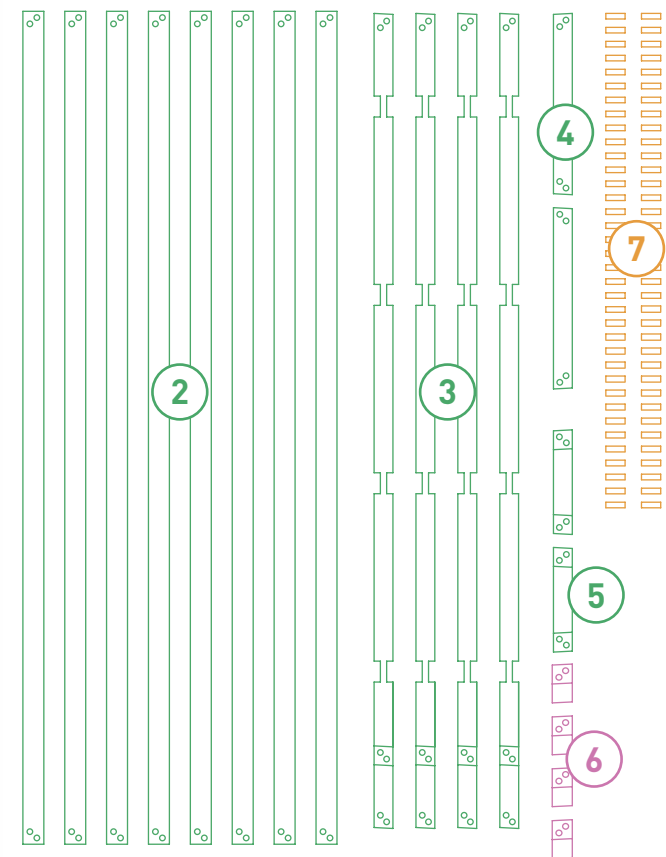
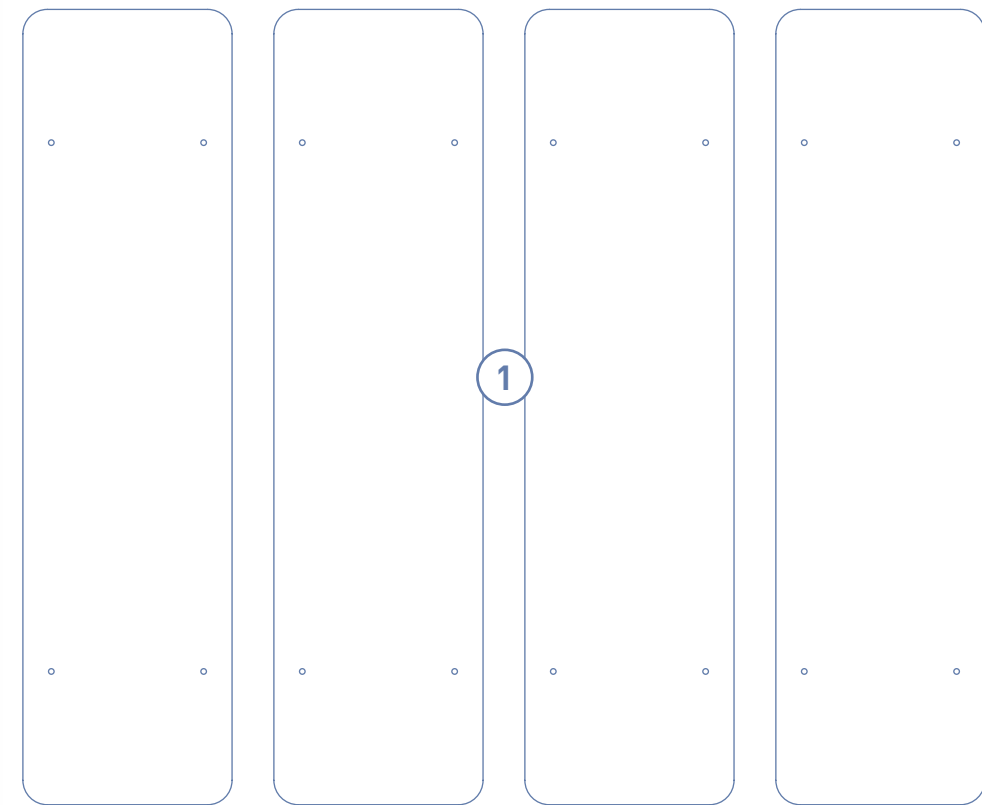
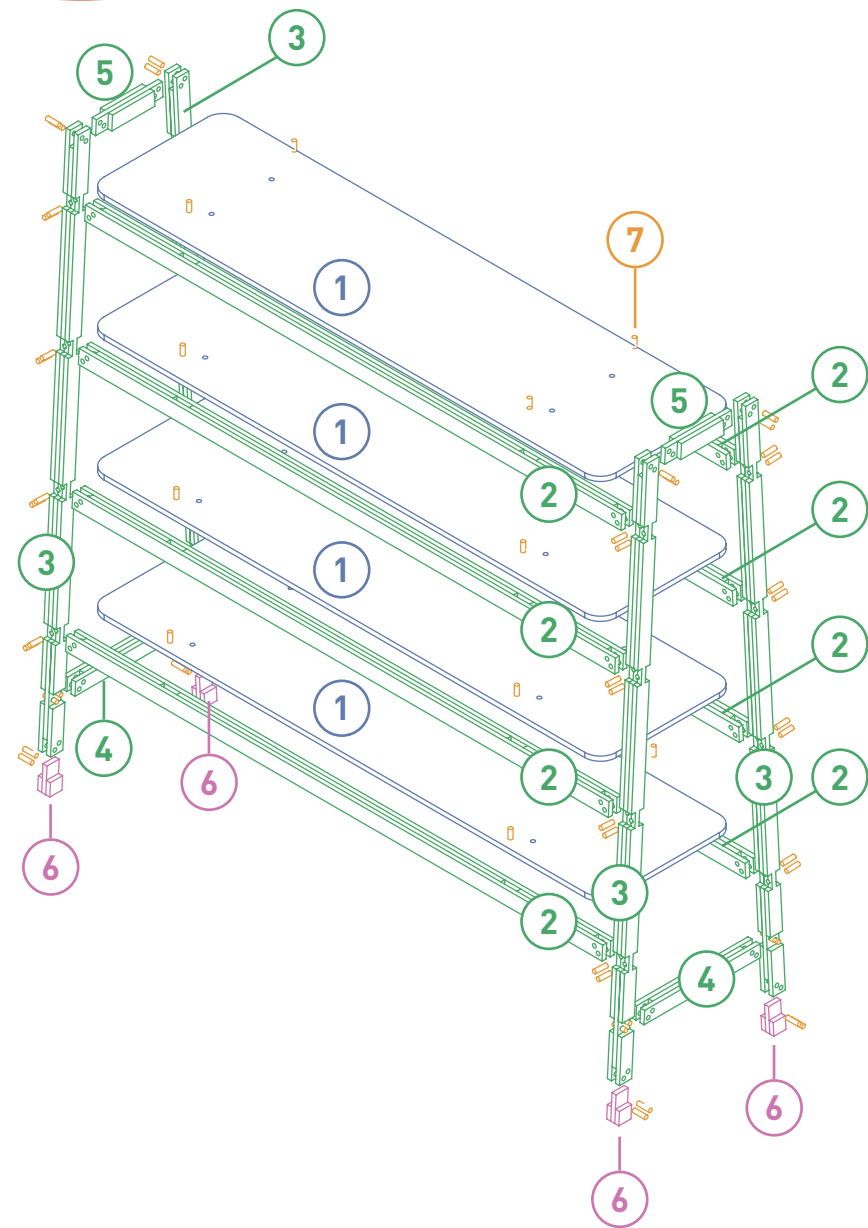
E3 - 54 / 5 / 5 - M





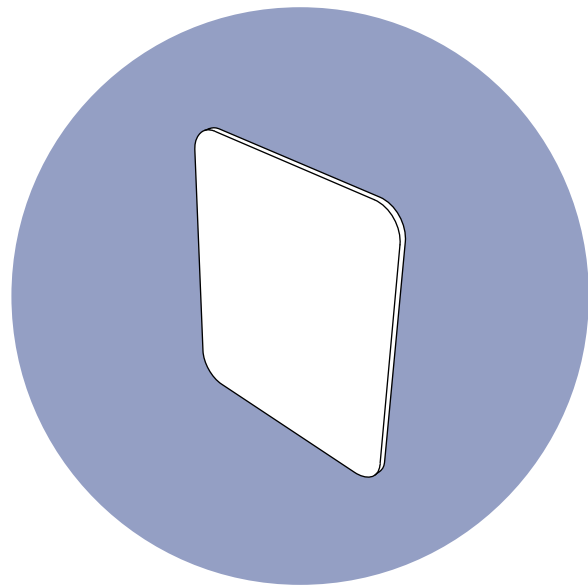
SHELF №1

-  wood plate [9 mm x 300 mm x 1140 mm] x 4
-  wood plank [9 mm x 27 mm x 44628 mm]
-  72 dowels
-  handsaw
-  hammer
-  drill
-  wood glue

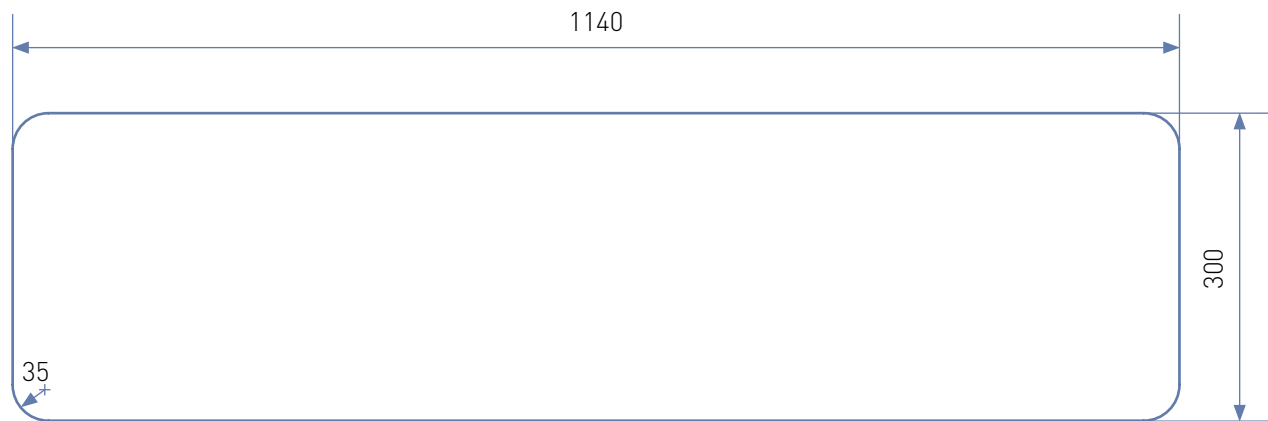


- 1** 4 x P - 1140 / 300 / 35
- 2** 8 x L1 - 1196 - FF
- 3** 4 x L3 - 1167 / 3 / 3 - FF
X3 - 90 / 3
X2 - 210
X2 - 480
X2 - 750
X2 - 1020
- 4** 2 x L3 - 260 / 3 / -3 - MM
- 5** 2 x L3 - 150 / 3 / -3 - MM
- 6** 4 x E3 - 54 / 3 / -3 - M
- 7** 72 x C1

STOOL № 1

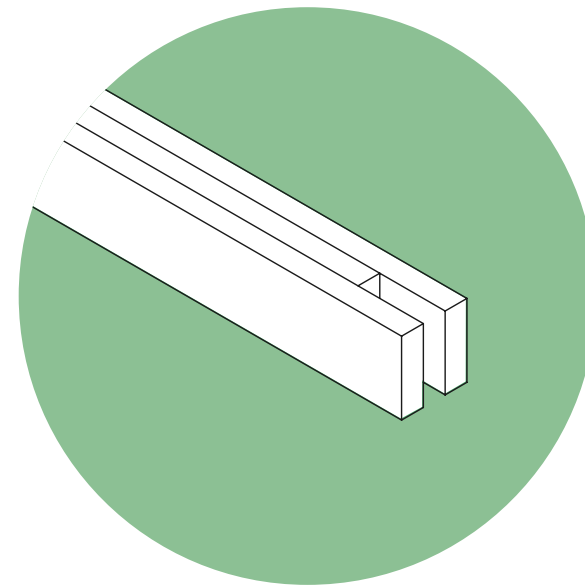
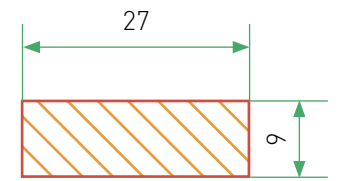


P - 1140 / 300 / 35

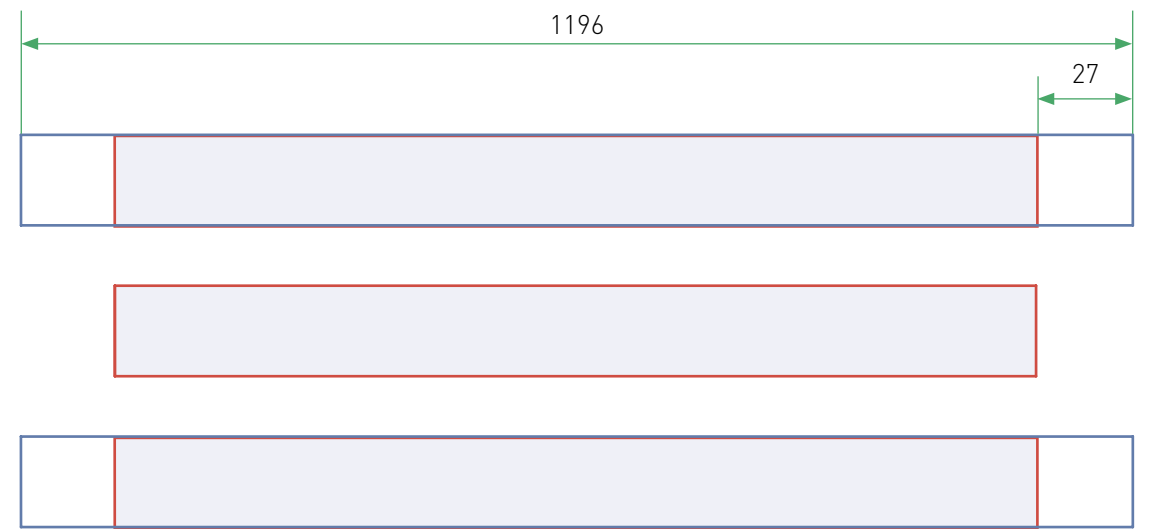


Furniture

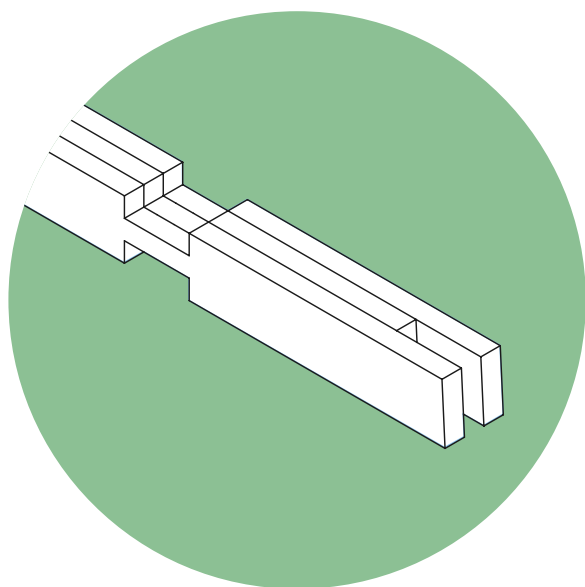
L1 - 1196 - FF



STOOL № 1

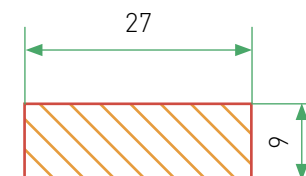


STOOL № 1

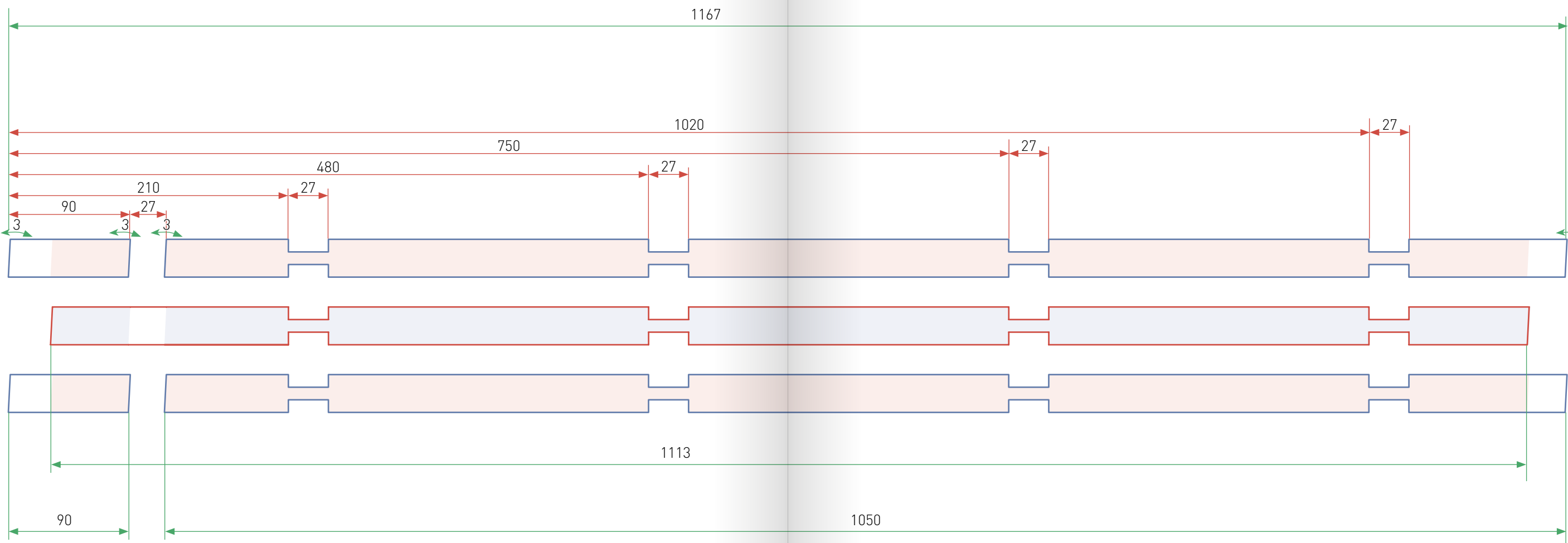


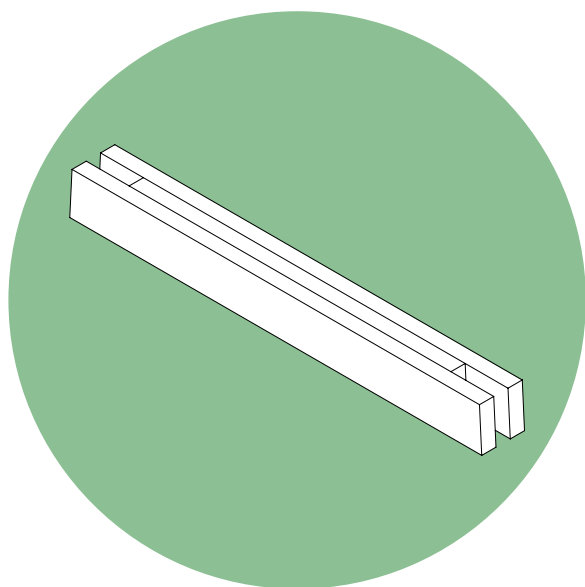
- L3** - 1167 / 3 / 3 - FF
- X3** - 90 / 3
- X2** - 210
- X2** - 480
- X2** - 750
- X2** - 1020

Furniture

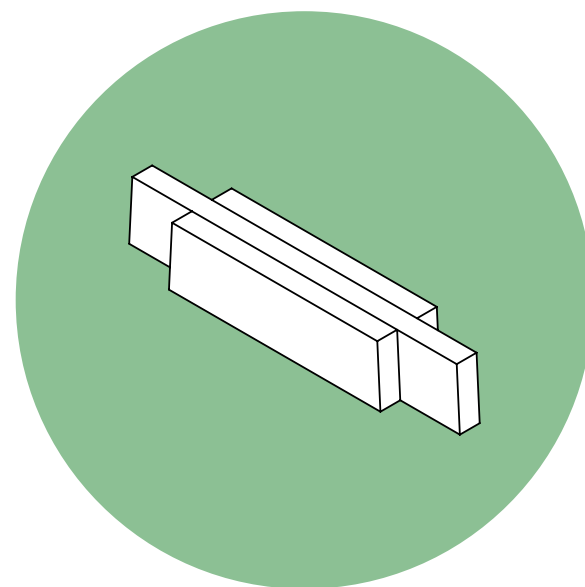
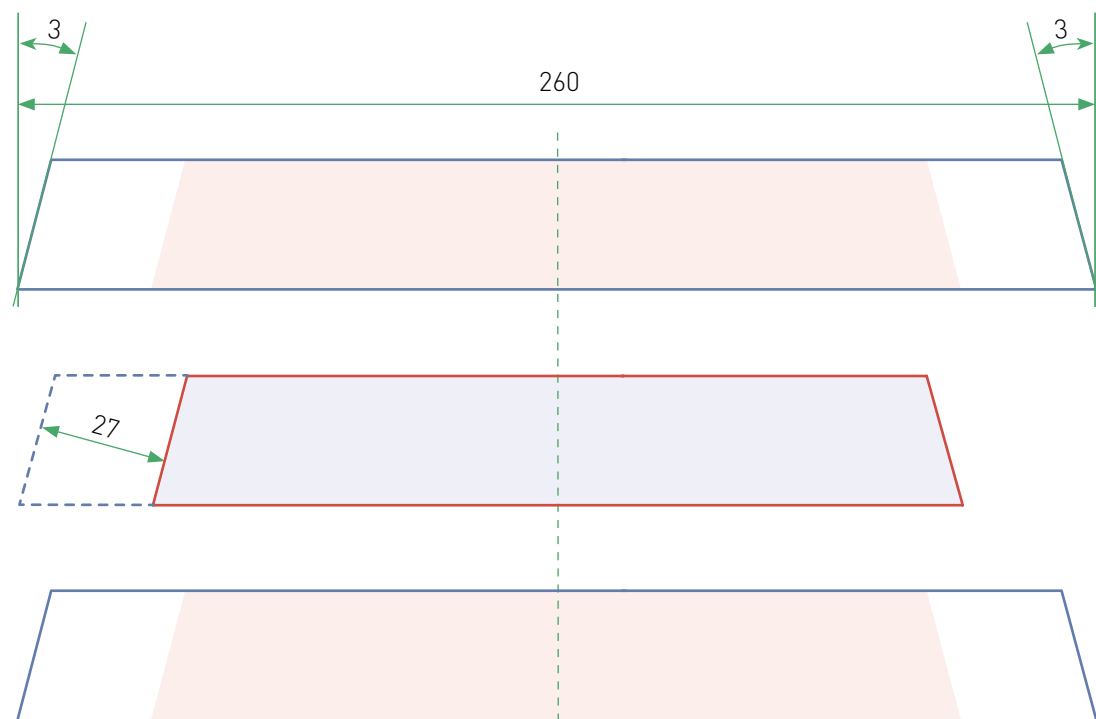
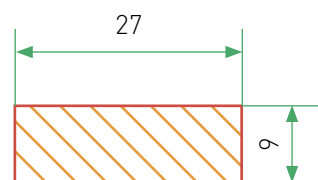


STOOL № 1

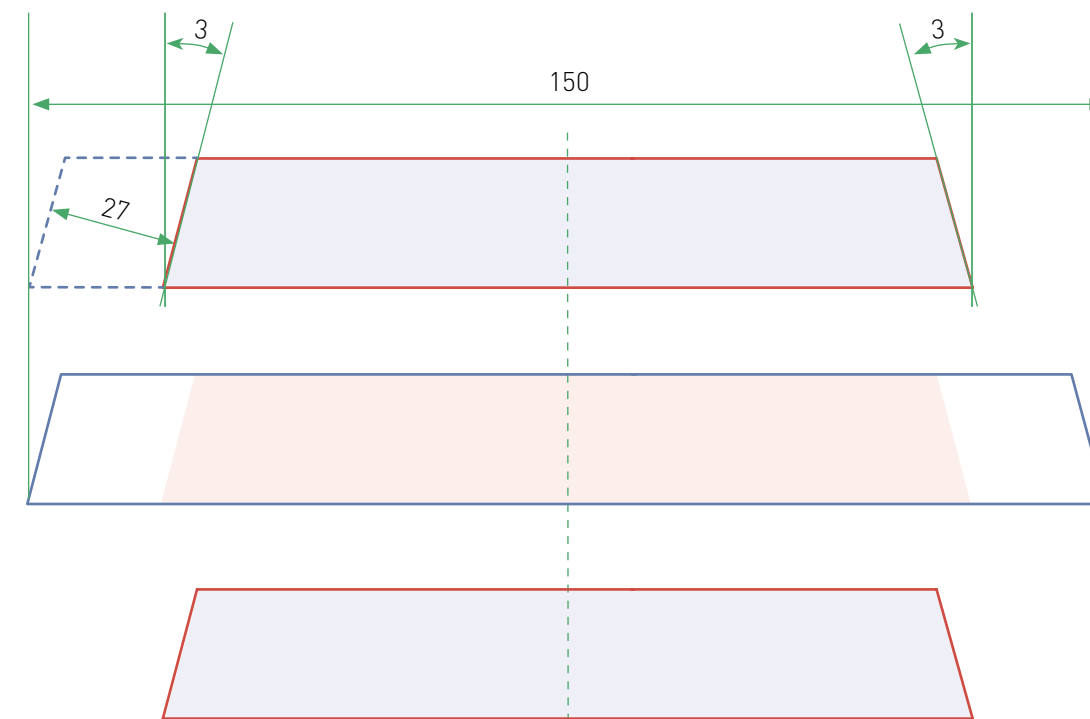
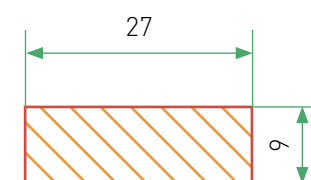


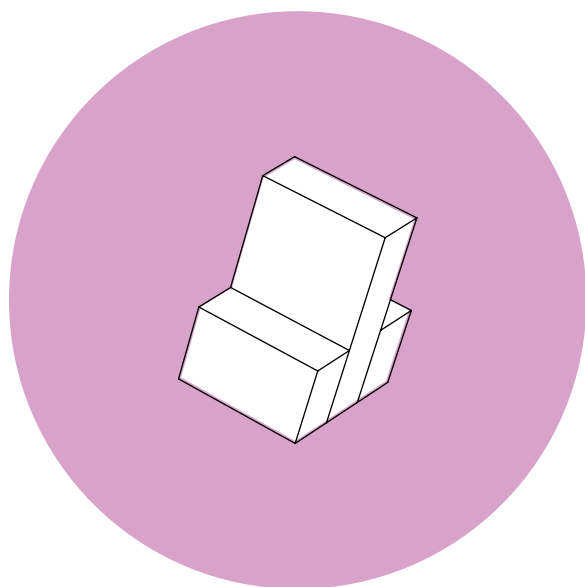


L3 - 260 / 3 / -3 - MM

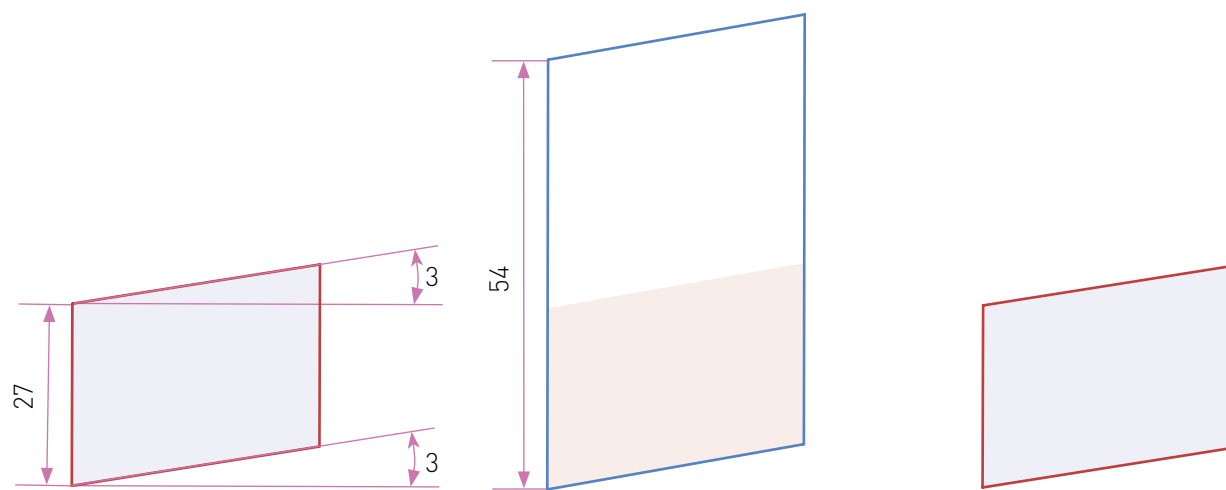
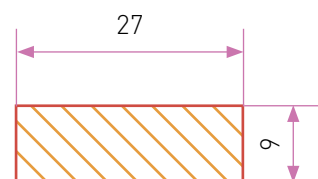


L3 - 150 / 3 / -3 - MM





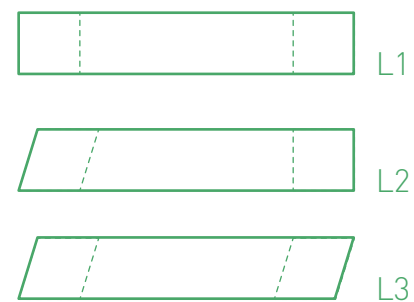
E3 - 54 / 3 / 3 - M



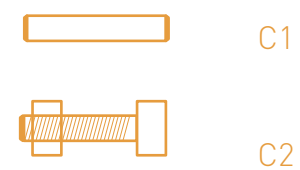
B Beam



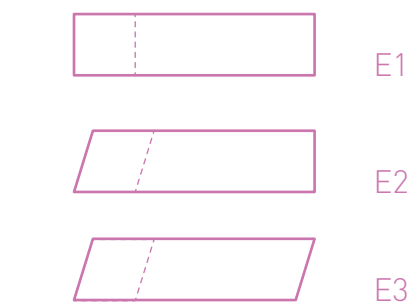
P Plate



L Link

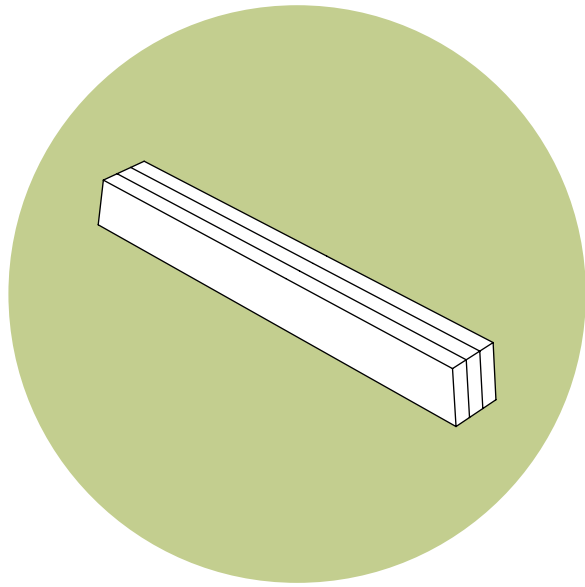


C Connection

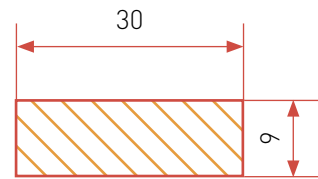


E Ending

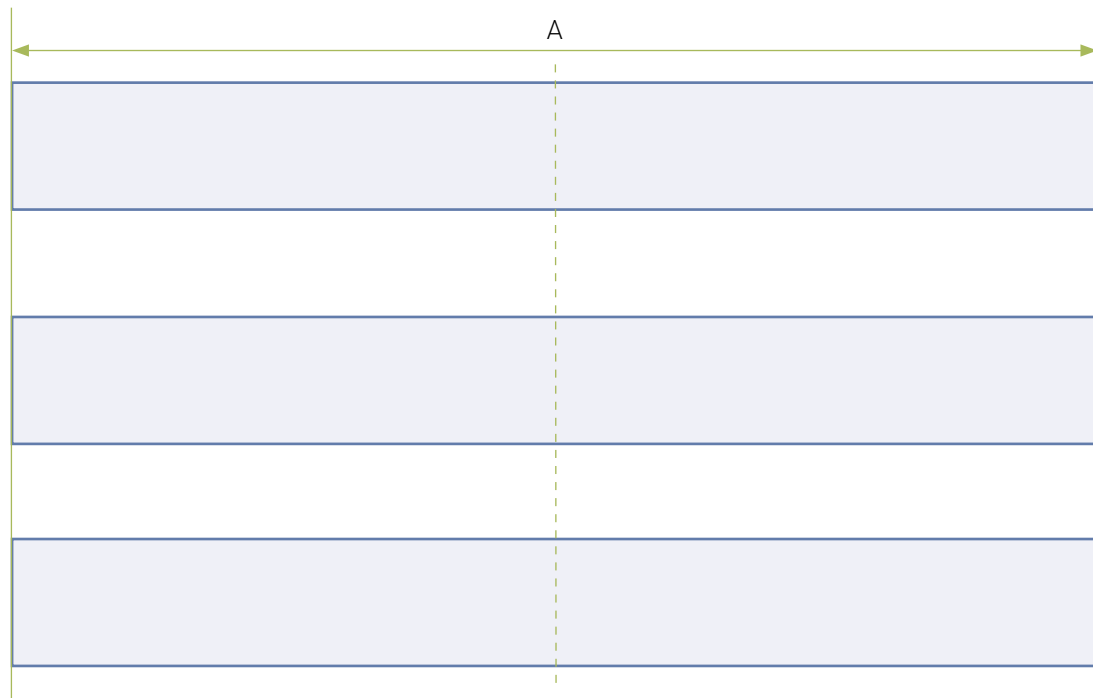
B - B1



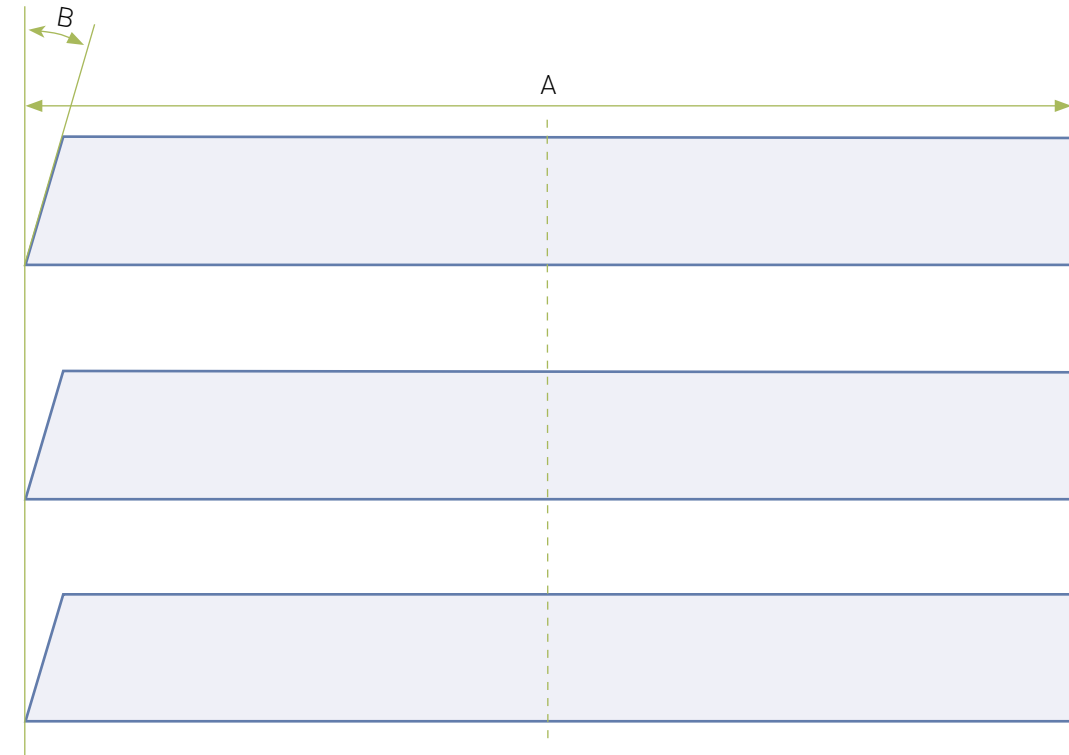
BEAM B



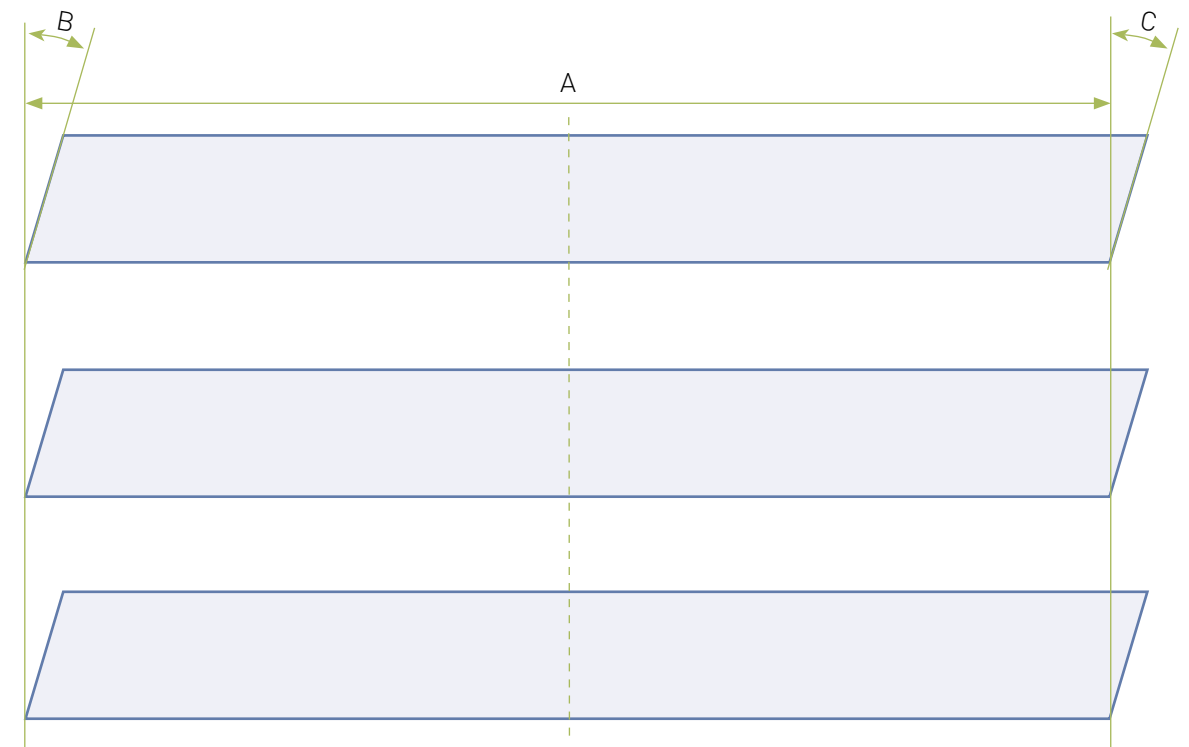
B 1 A[mm]



B 2 A[mm] / B[°]

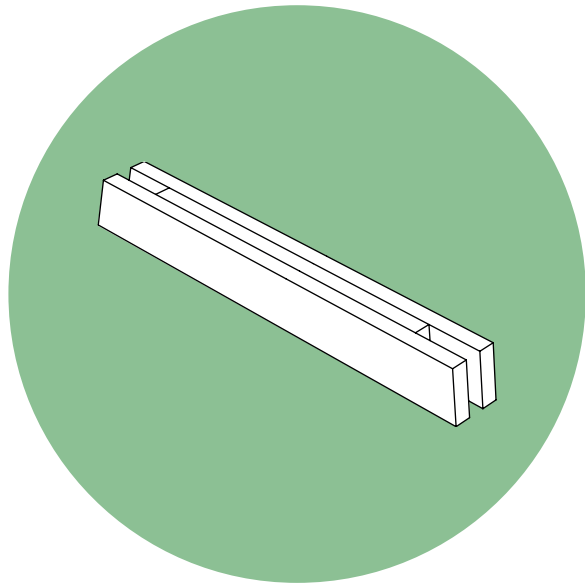


B 3 A[mm] / B[°] / C[°]

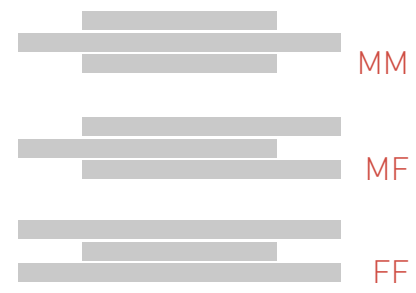
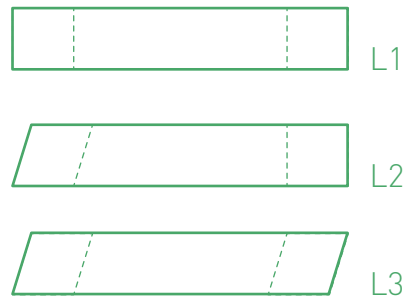
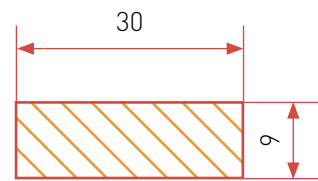


B 2 - B 3

L



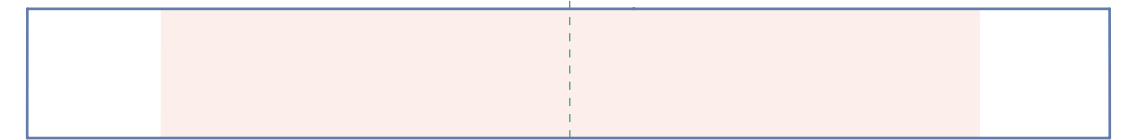
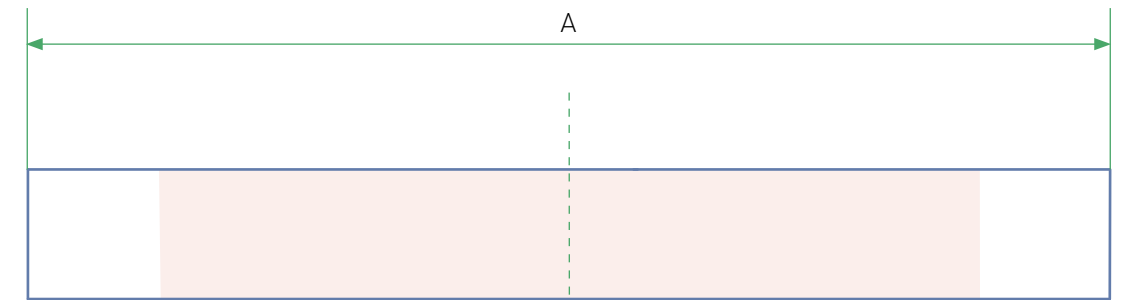
LINK L



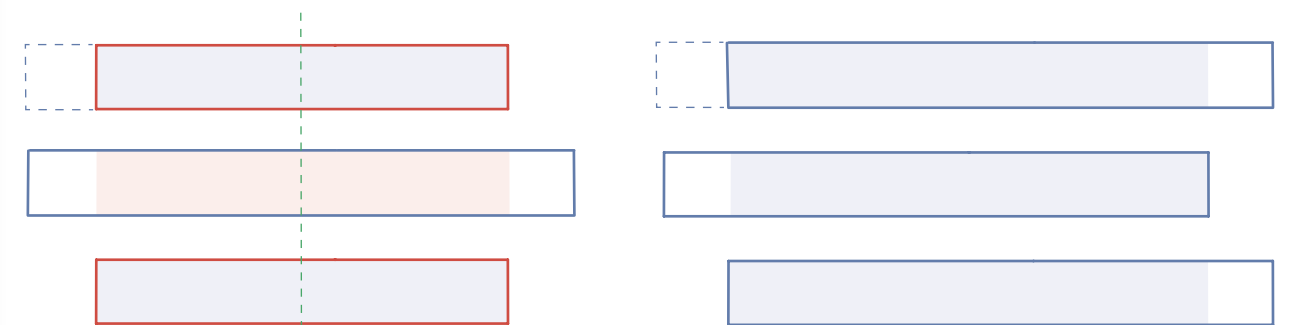
Male / Female

L 1 A[mm]

L 1



FF

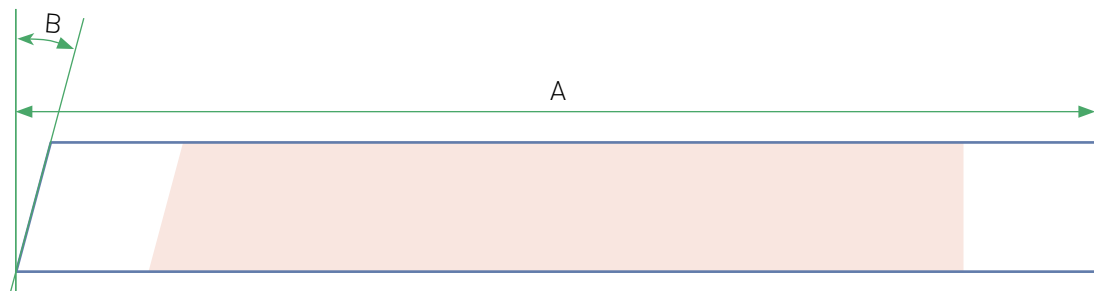


MM

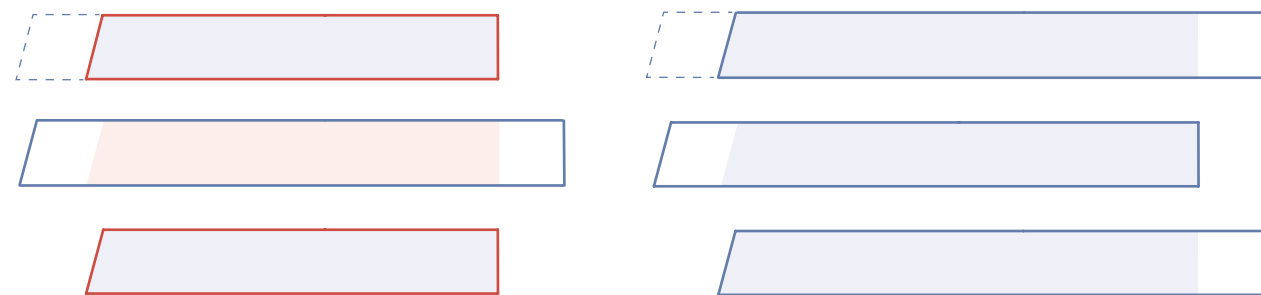
MF

L 2

L 2 A[mm] / B[°]



FF

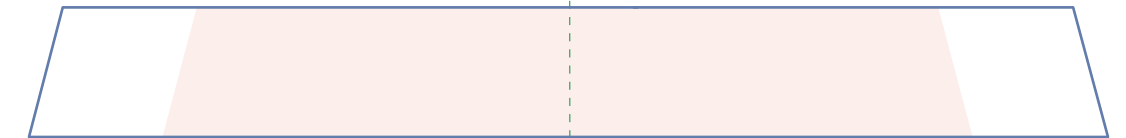
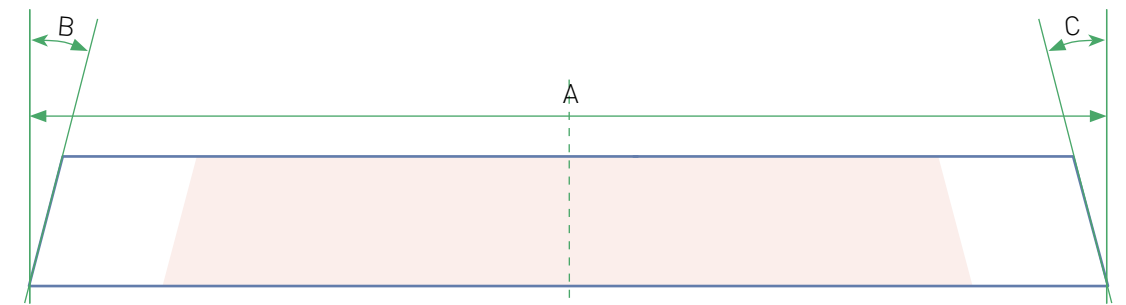


MM

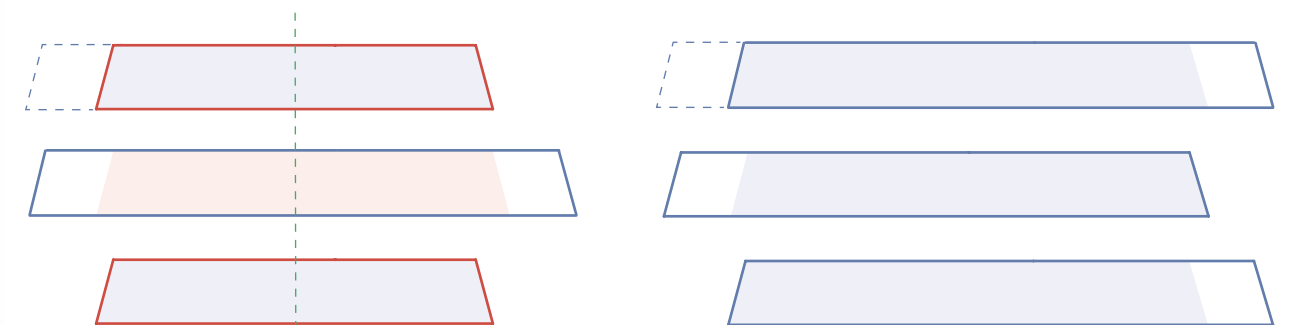
MF

L 3 A[mm] / B[°] / C[°]

L 3



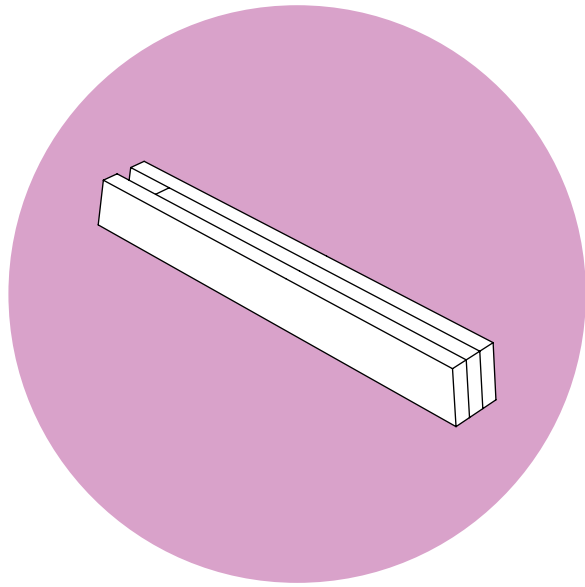
FF



MM

MF

E



E1



E2



E3



MM



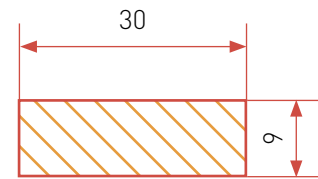
MF



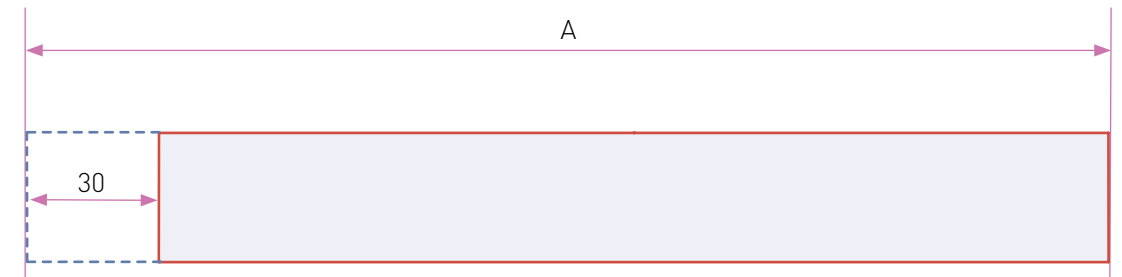
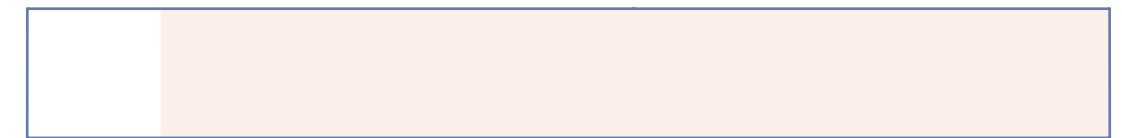
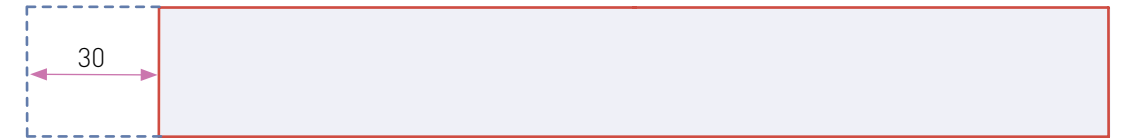
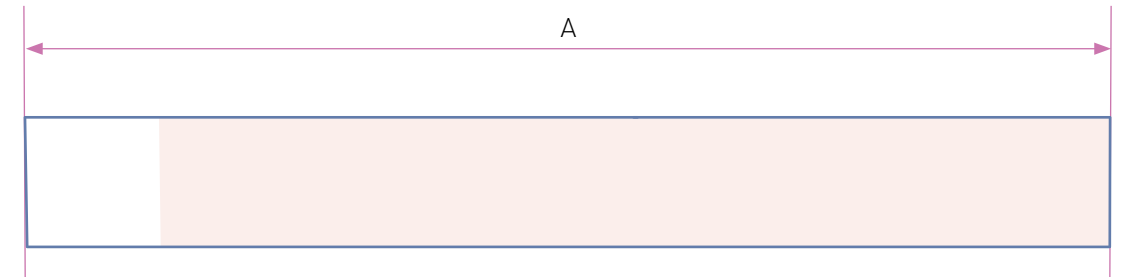
FF

Male / Female

ENDING E



E 1 A[mm]



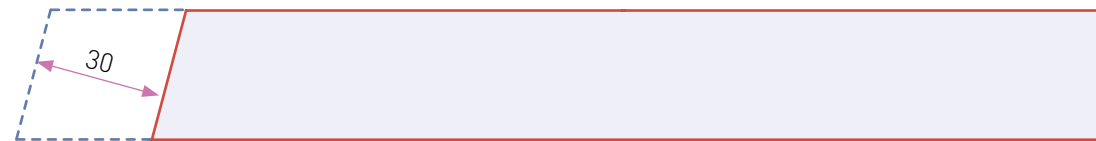
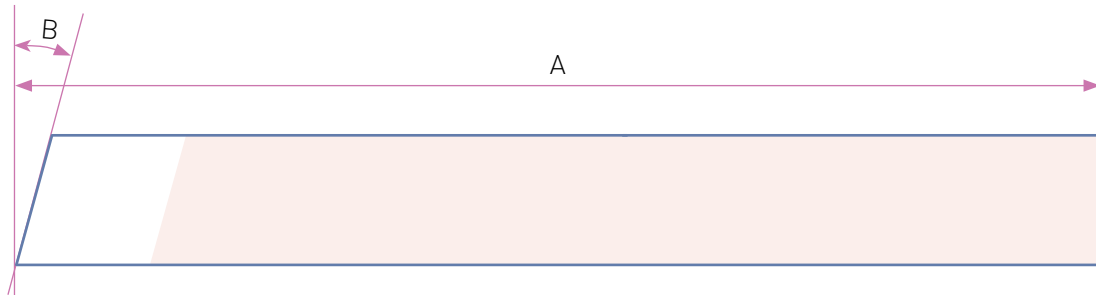
F

M

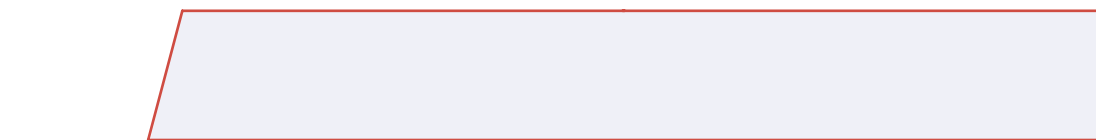
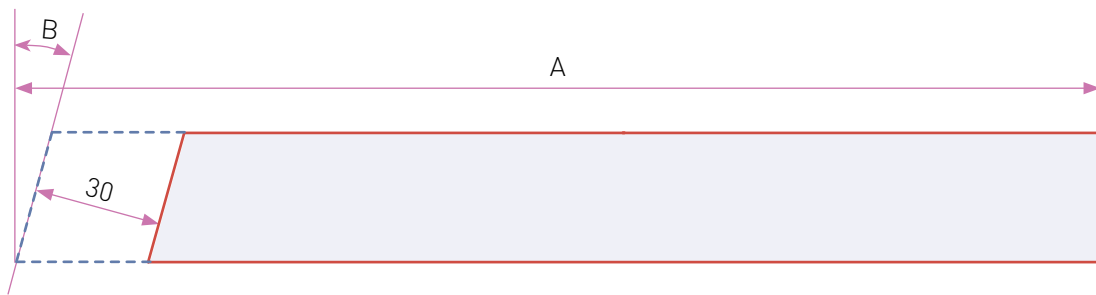
E 1

E 2

E 2 A[mm] / B[°]



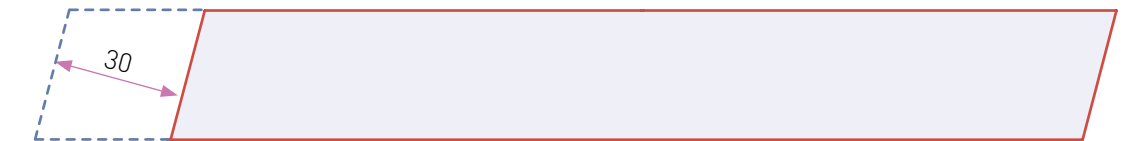
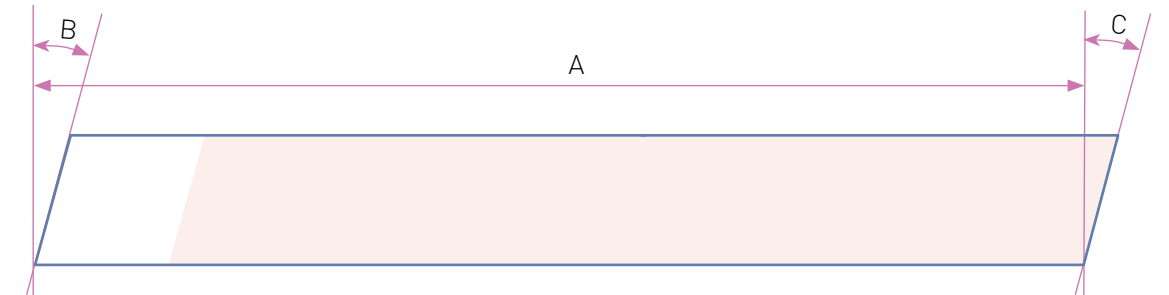
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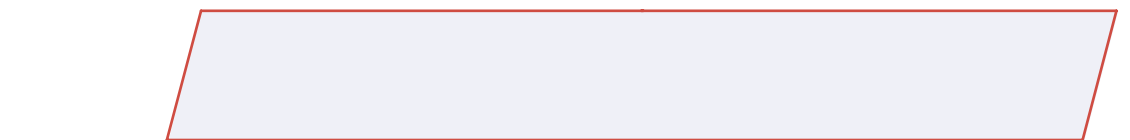
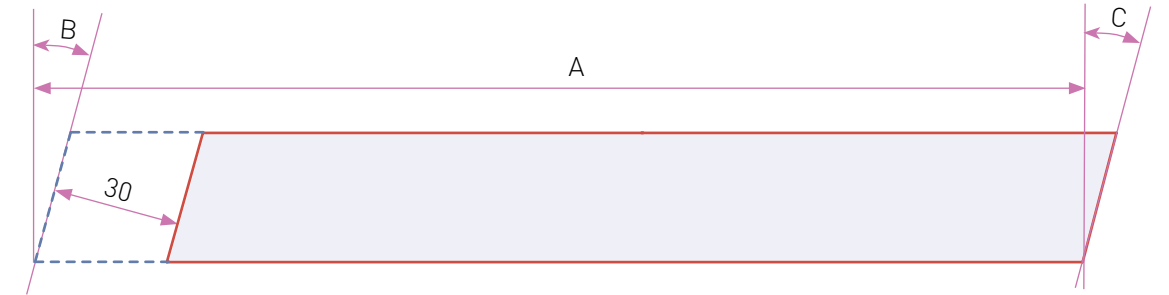
M

E 3 A[mm] / B[°] / C[°]

E 3

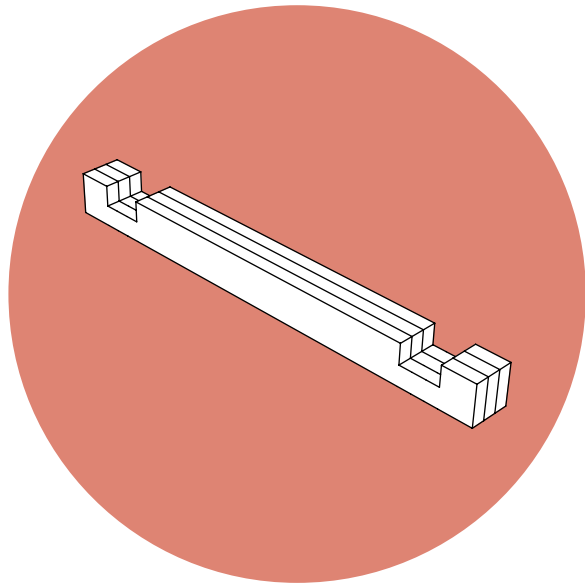


F



M

X - X1 - X2



CUT X

X 1 A[mm]



X 2 A[mm]



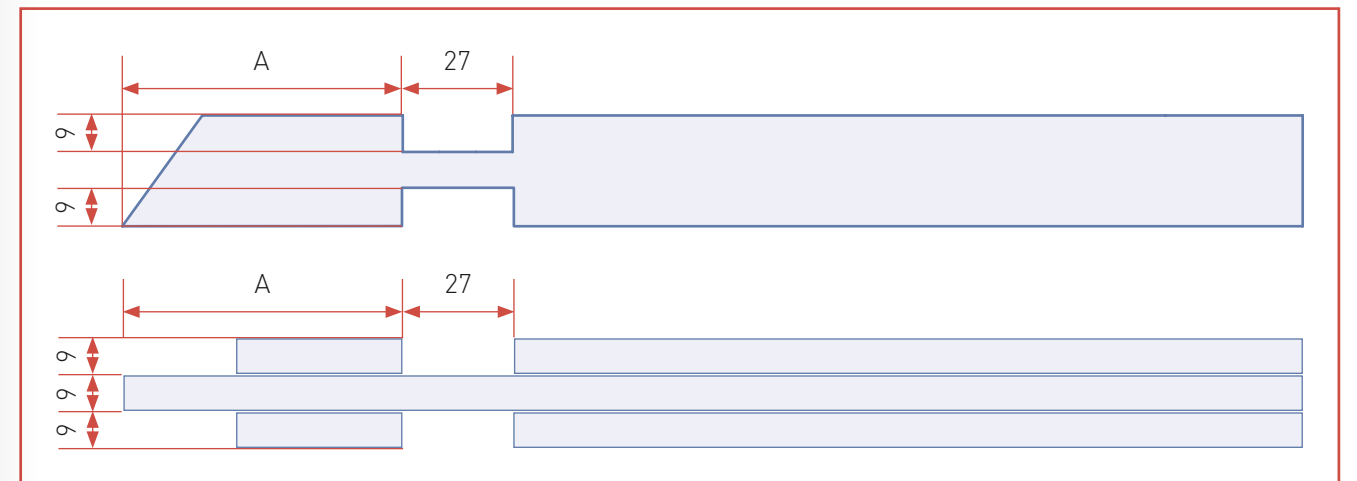
Modules | Cut

X3 - X4

X 3 A[mm]



X 4 A[mm], B[°]



P

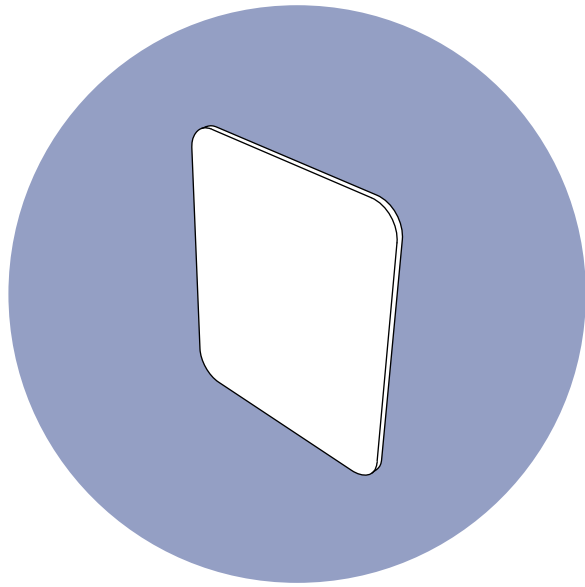
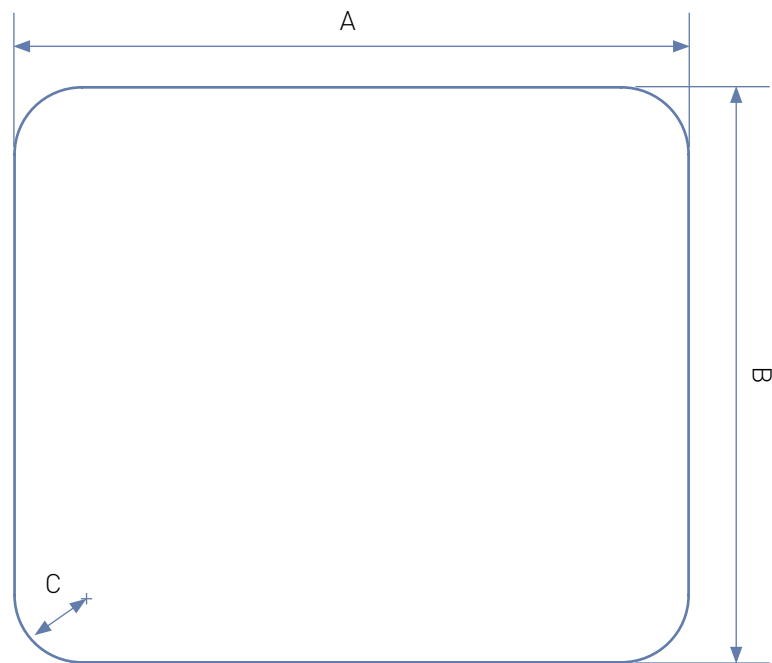
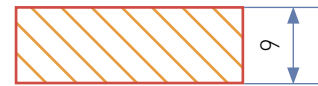


PLATE P

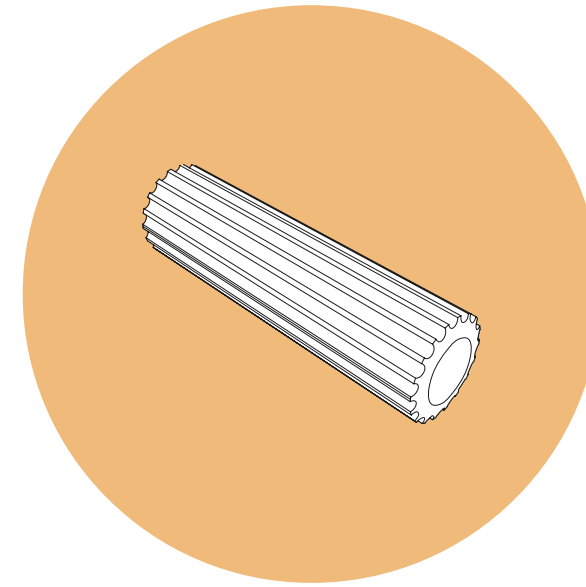
A[mm] / B[mm] / C[mm]



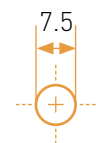
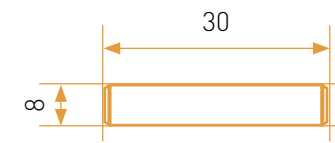
Modules

CONNECTION C

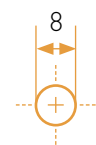
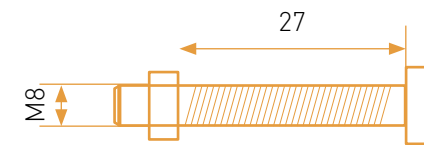
C - C1 - C2

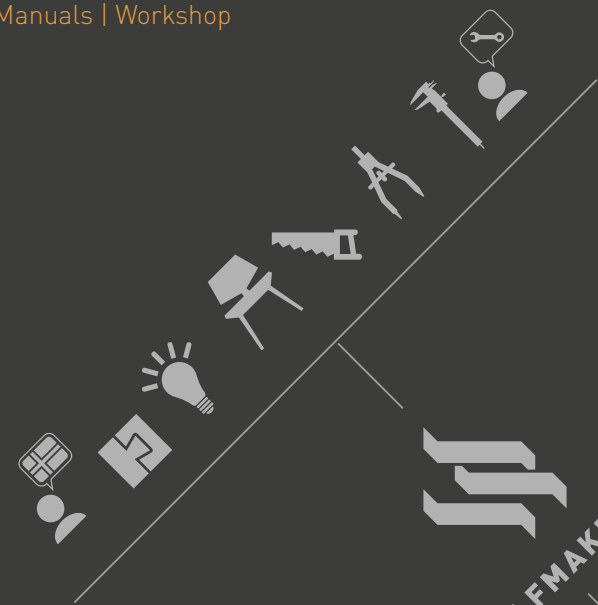


C 1

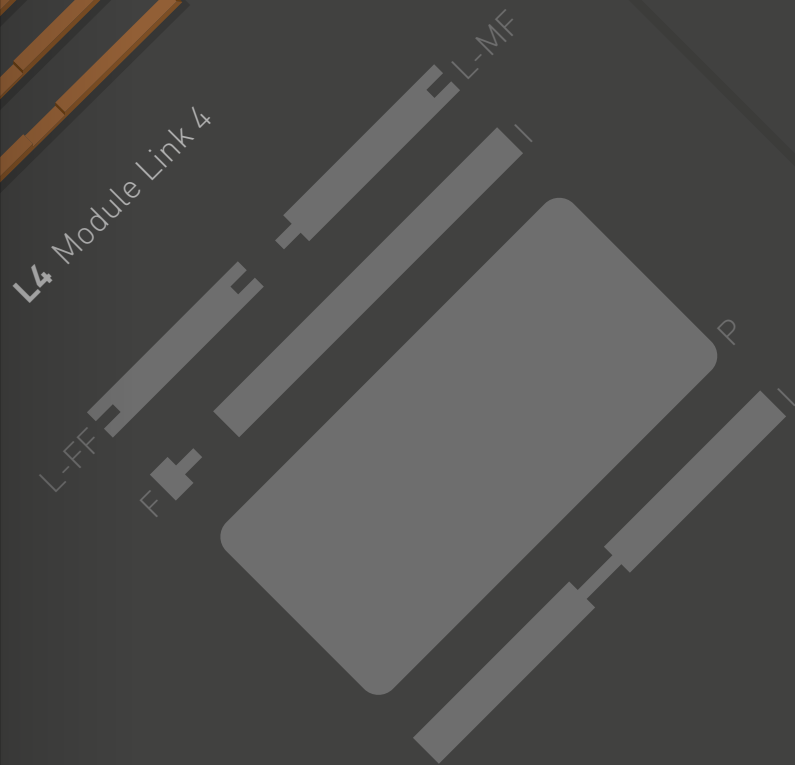
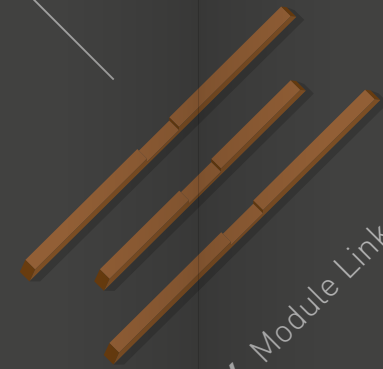
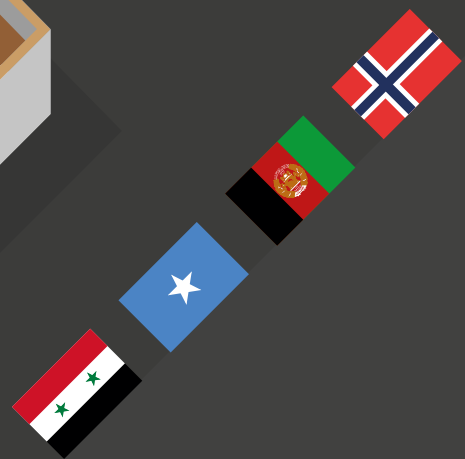
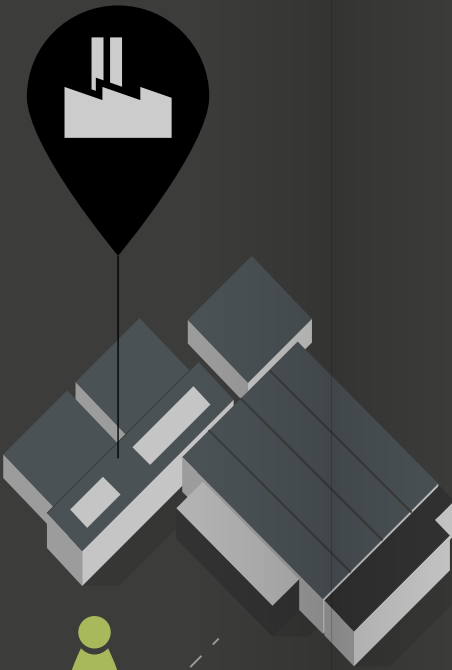


C 2

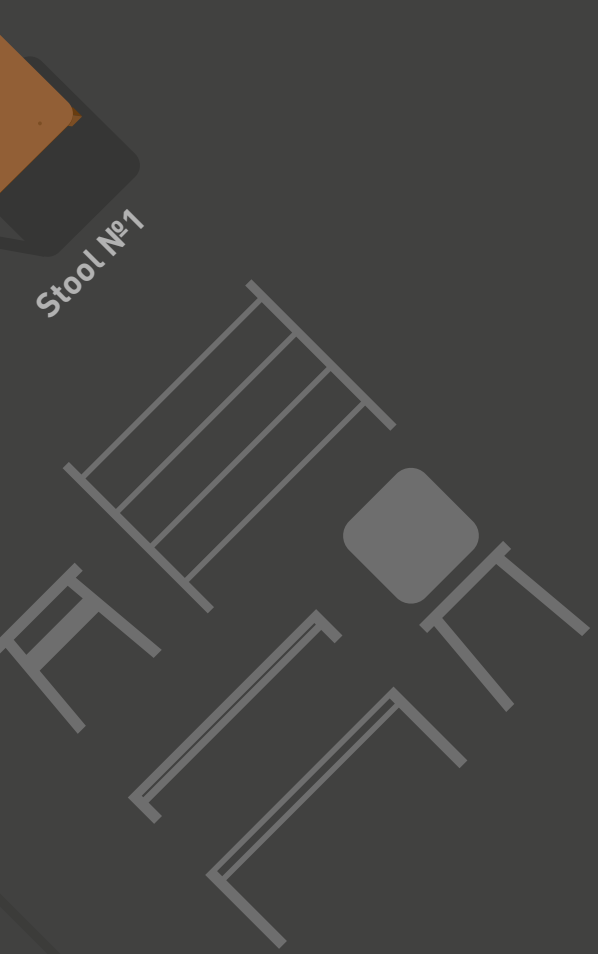




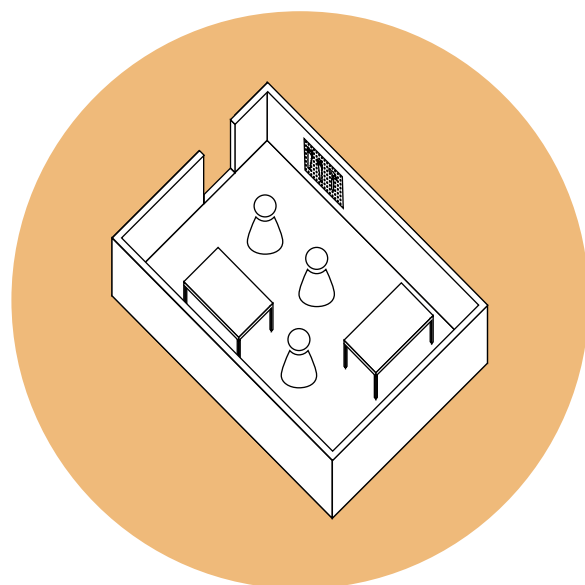
SELFMAKERS



SELFMAKERS



Stool №1

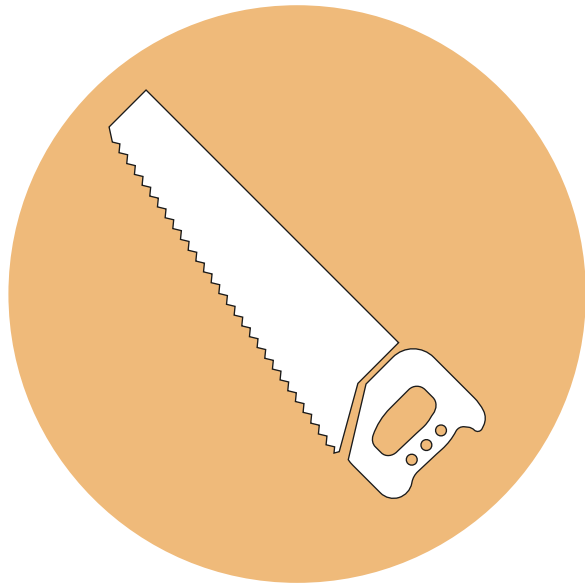


ORGANISATION

Workshop

The development and production system that is explained in the Selfmakers manual can be used in different scaled models. The dimensioning can and should evolve during the process. An important condition for growth is the generation of donations and/or attaining public funding. Starting with one of the first two scales lowers the starting barrier considerably.

	SPACE	ACTIVITY	PERSONNEL	EQUIPMENT	MATERIALS	RUNNING COSTS	ECONOMICAL SUSTAINIBILITY
SESSION	available space in asylum centers or social facilities (including schools), must be cleanable and acoustically separated from neighbors	furniture for personal use will be produced in regular meetings	few organizers, open group of predominantly refugee participants cooperation with a particular asylum center	hand tools use of the existing infrastructure such as water boilers, cleaning equipment	precut planks and plates few variations	marginal energy cost, wood glue, sand paper, etc.	based on the center's budget and donations of tools and materials. A permanent material donator is utterly helpful
LOW-VOLUME PRODUCTION WORKSHOP	own workshop space with low requirements, low use of electricity sanitation and break spaces	furniture for personal use will be produced in regular meetings donations to the center	organization group of norwegians and refugees, mixed but periodic participants cooperation with an asylum center or an organization	hand tools, hobby carpentry machines products for cleaning and breaks must be acquired	precut planks and plates might adjust to possible donations of materials and tools	marginal energy cost, wood glue, sand paper rent for the space	based on the center's budget and donations of tools and materials. A permanent material donator is utterly helpful, public funding
BATCH PRODUCTION WORKSHOP	own carpentry workshop space, requirements depend on available tools, if necessary heavy current	furniture for personal use will be produced in regular meetings furniture supply for national asylum centers	organization group of norwegians and refugees, mixed but periodic participants cooperation with an asylum center, an organization or a company	extensive carpentry equipment, including table saws and drilling presses highly dependant on donations	a high range of raw materials can be processed depending on the available tools	medium energy cost, wood glue, sand paper rent for the space	based on the center's budget and donations of tools and materials. A permanent material donator is utterly helpful, public funding



EQUIPMENT & MATERIAL

SESSION

LOW-VOLUME AND / OR BATCH PRODUCTION

MEASURING EQUIPMENT

- measuring meters
- carpenter squares
- metal rulers

NON-ELECTRIC HANDTOOLS

- handsaws (japanese saws, fine saws)
- hand drills
- chisels
- clamps
- hammers
- vices
- planers

ELECTRIC HANDTOOLS

- electric drills
- electric planers
- jigsaws
- circular blade saws

STATIONARY TOOLS

- chop saw
- table saw
- drill press
- belt sander
- band sander
- lathe
- sewing machines

Several tools and materials can be usefull. The range of processable construction materials depends on the available tools and vice versa. Most stationary machines require professional HSE introductions, supervision and particular infrastructural features, such as ventilation, heavy current and security equipment.

SAFETY EQUIPMENT

- security gloves
- security glasses
- ear protection
- work clothes
- dust masks

PRECUT MATERIAL

- plywood / massive wood – cut into plates and planks

RAW MATERIAL

- uncut plywood
- uncut wood
- ropes
- fabric
- metal profiles
- bamboo



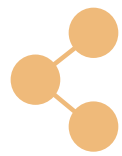
COMMUNICATION

Public communication is essential for creating a sustainable structure by donations and support. Furthermore a network of international participants has to be created and maintained.



WEBSITE

The selfmakers homepage www.selfmakers.org informs about the concept and the created furniture to adress both, participants and donators.



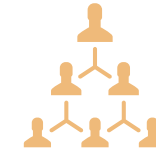
SOCIAL MEDIA SELFMAKERS

Digital communities can help to create a sustainable network of donators and volunteers.



SOCIAL MEDIA WORKSHOP

The individual workshops should have a separate community in addition, as done for the asylum centers as well.



CENTER STRUCTURE

The communicative structure in the asylum centers should be used to mobilize capacities and facilities.



NEWS PAPER

Local and national newspapers are still very powerful options to promote the concept in order to generate donations and support.



PHONE CONTACT

Most arrangements should be done in direct contact to avoid misunderstandings and save time.



E-MAIL CONTACT

As far as our experience goes, e-mail communication is of limited suitability, since answers might take long time or stay away.



PERSONAL VISITS

Direct contact remains the best and irreplaceable opportunity to interest possible donators in the project.