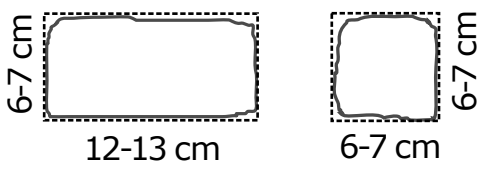


BLOCK SIZES \*

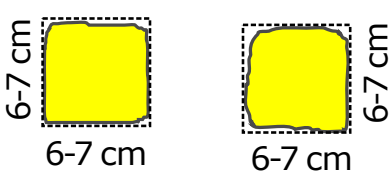
St - Standard Block (n≈8100)



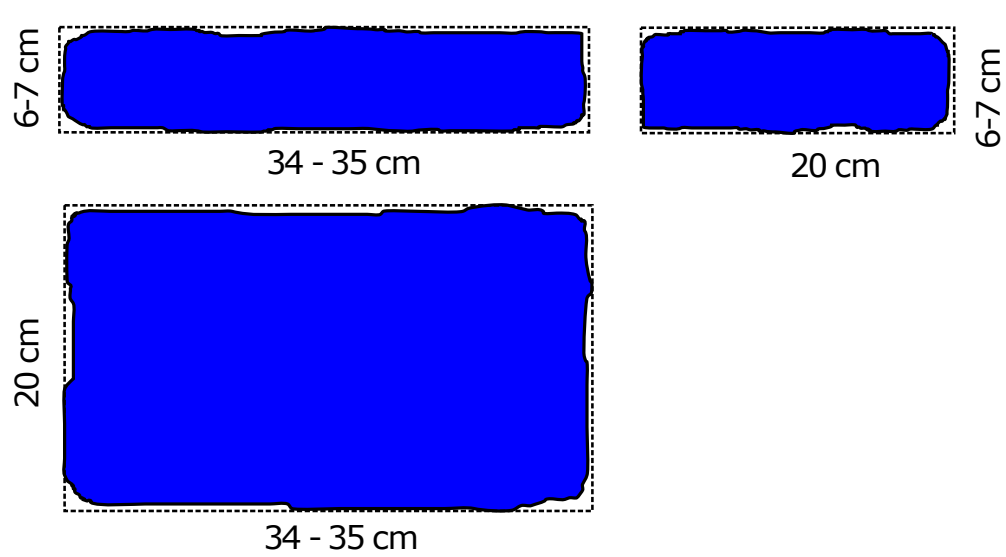
Sp1- Special Block 1 (n≈85)



Sp2- Special Block 2 (n≈180)



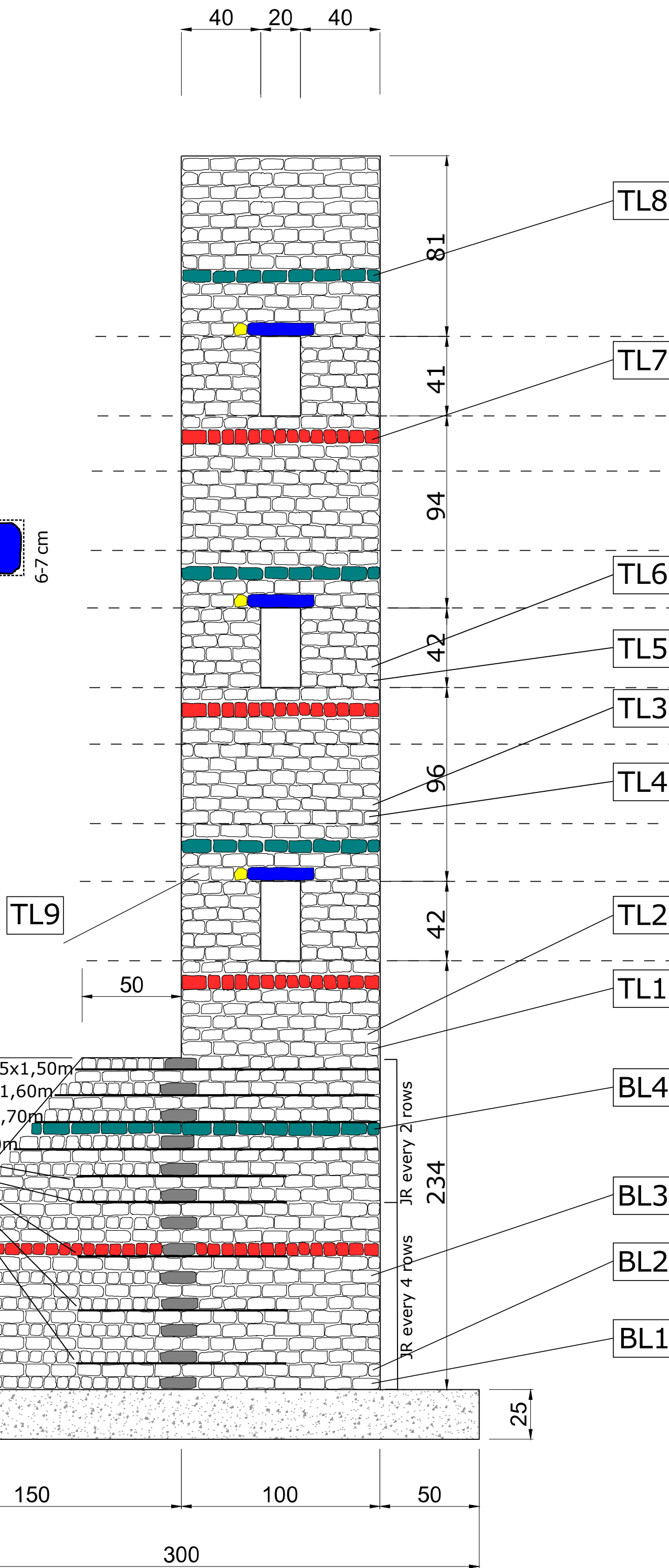
Sp3 - Special Block 3 (n=10)



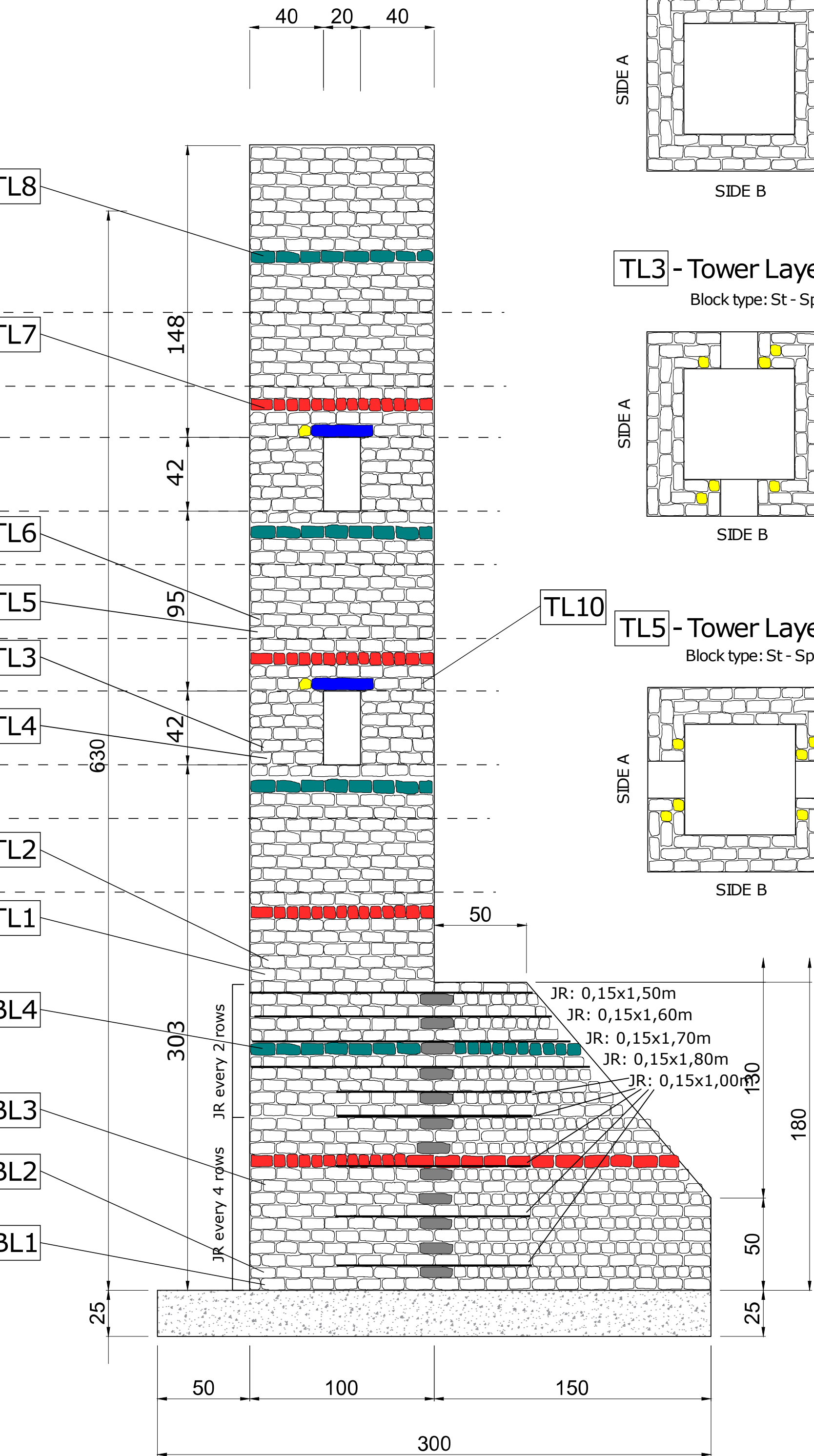
\*All the blocks must have an almost regular shape to obtain a periodic texture, but irregular surfaces and edges, to reproduce, as much as possible, historic masonry

\*\*Mortar joints must be a few millimeters thick (max 3-4 mm)

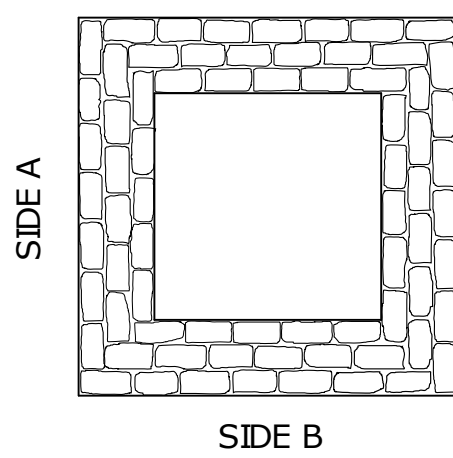
PERSPECTIVE DRAWING  
SIDE A



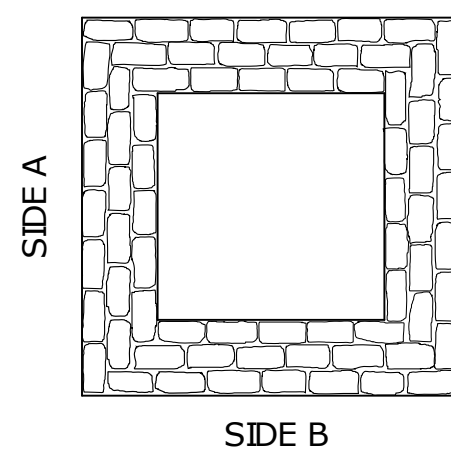
PERSPECTIVE DRAWING  
SIDE B



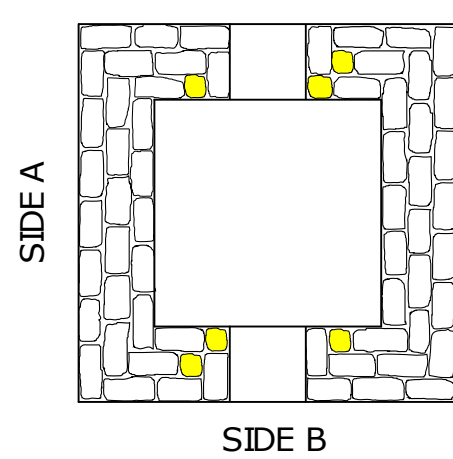
TL1 - Tower Layer 1  
Block type: St



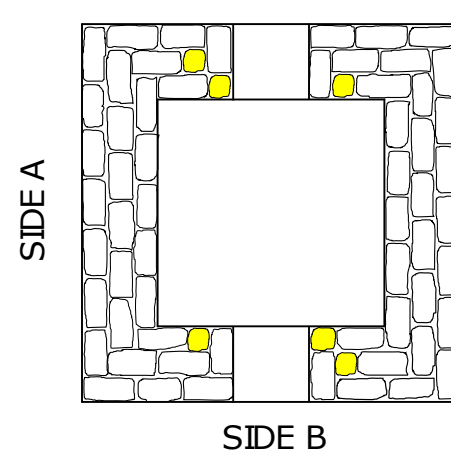
TL2 - Tower Layer 2  
Block type: St



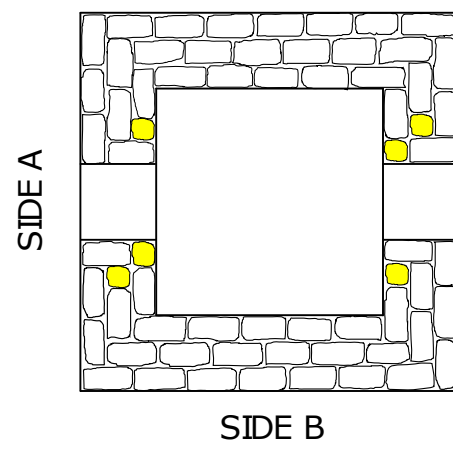
TL3 - Tower Layer 3  
Block type: St - Sp2



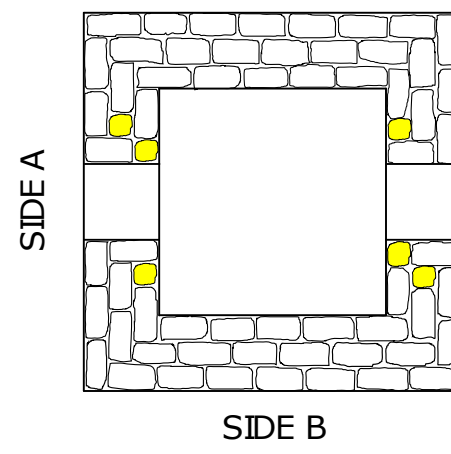
TL4 - Tower Layer 4  
Block type: St - Sp2



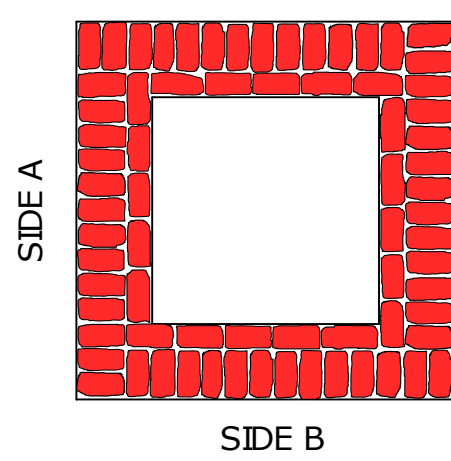
TL5 - Tower Layer 5  
Block type: St - Sp2



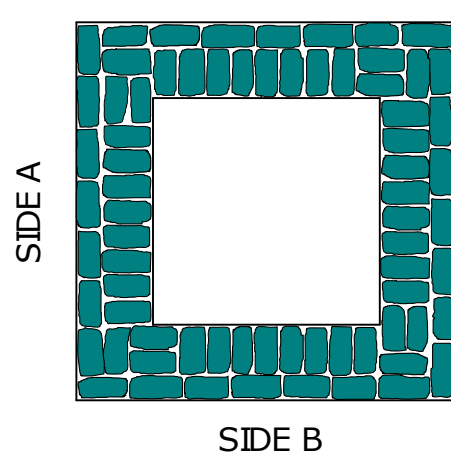
TL6 - Tower Layer 6  
Block type: St - Sp2



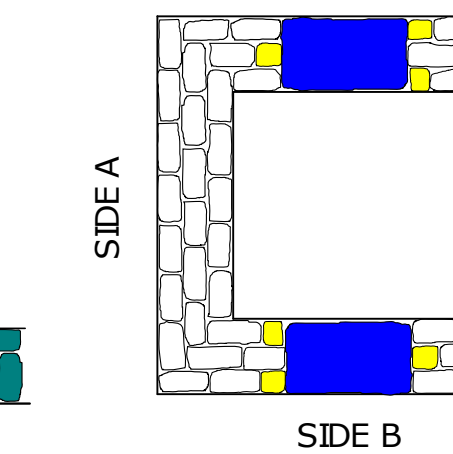
TL7 - Tower Layer 7  
Block type: St



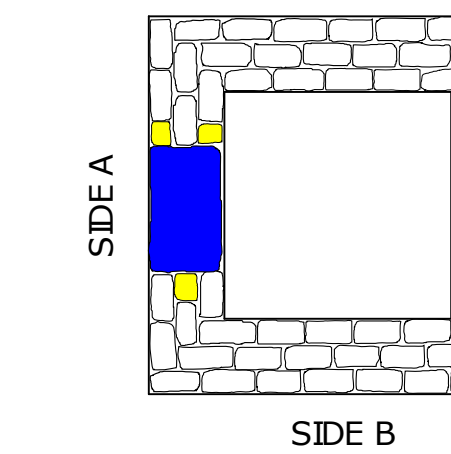
TL8 - Tower Layer 8  
Block type: St



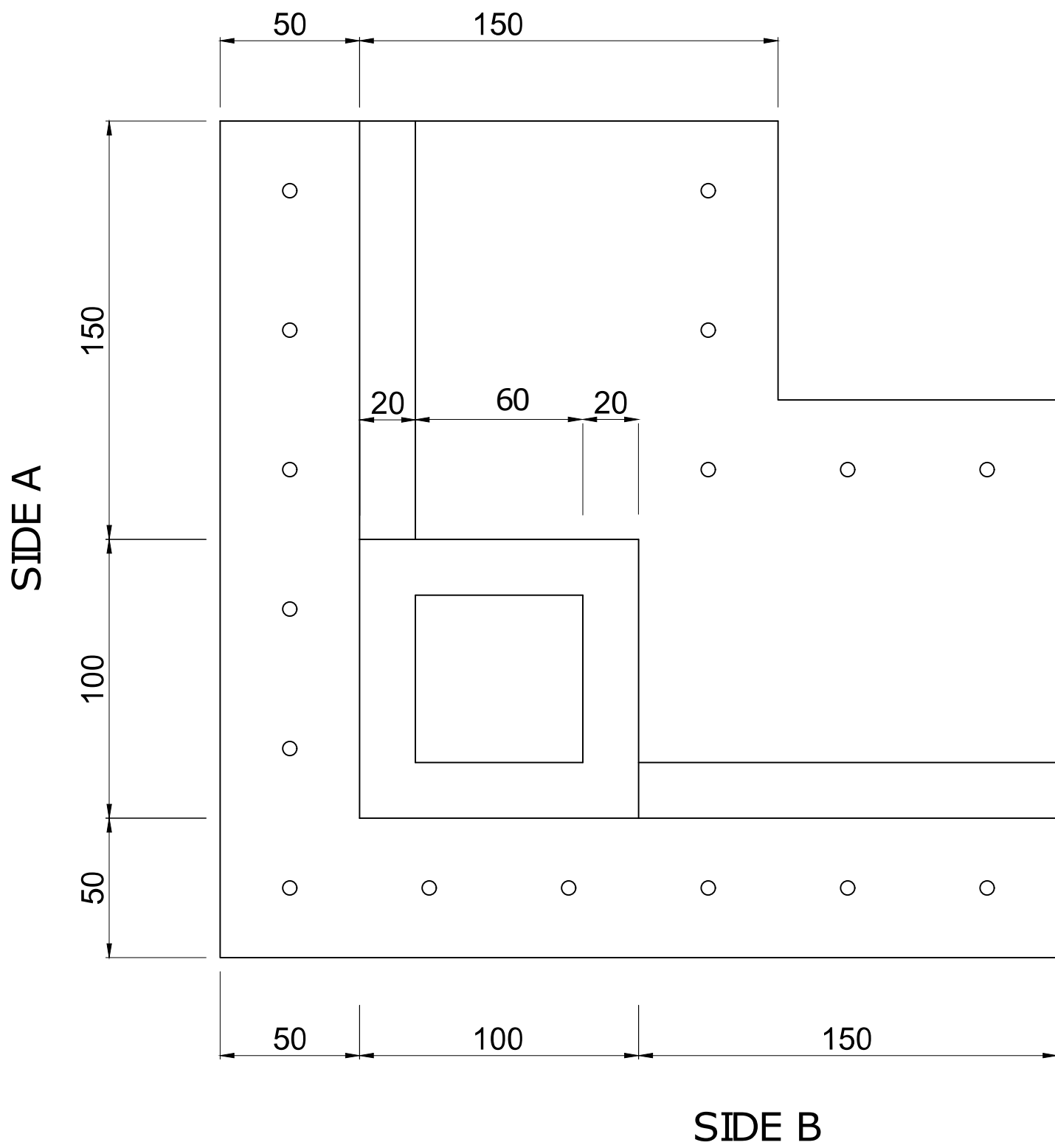
TL10 - Tower Layer 10  
Block type: St - Sp2 - Sp3



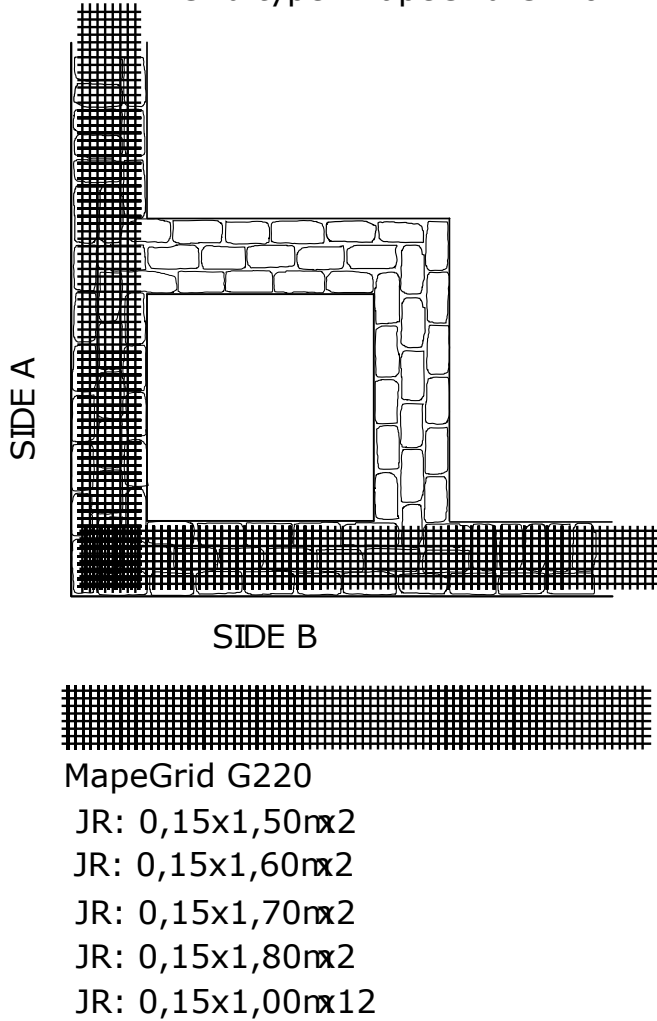
TL9 - Tower Layer 9  
Block type: St - Sp2 - Sp3



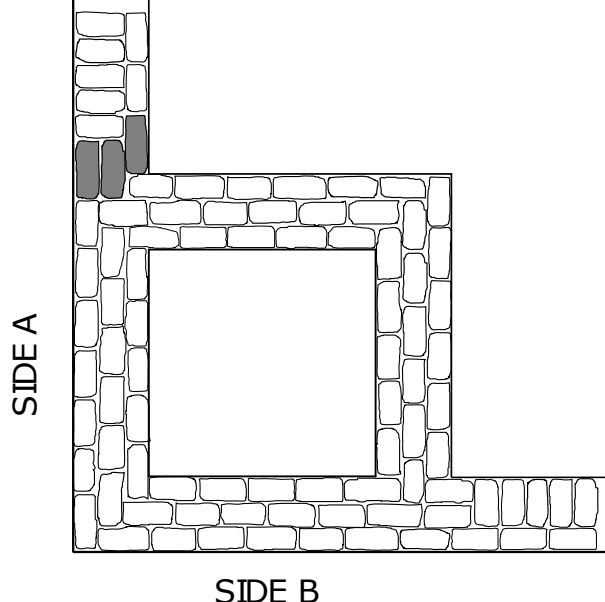
PLAN



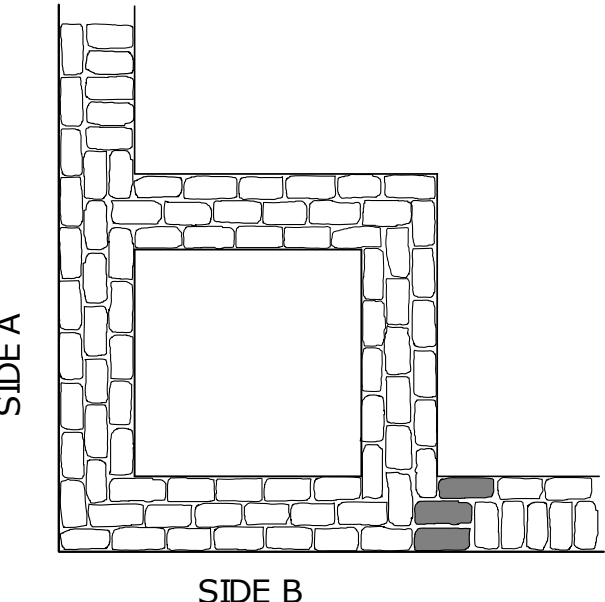
JR - Joint Reinforcement  
Grid type: MapeGrid G220



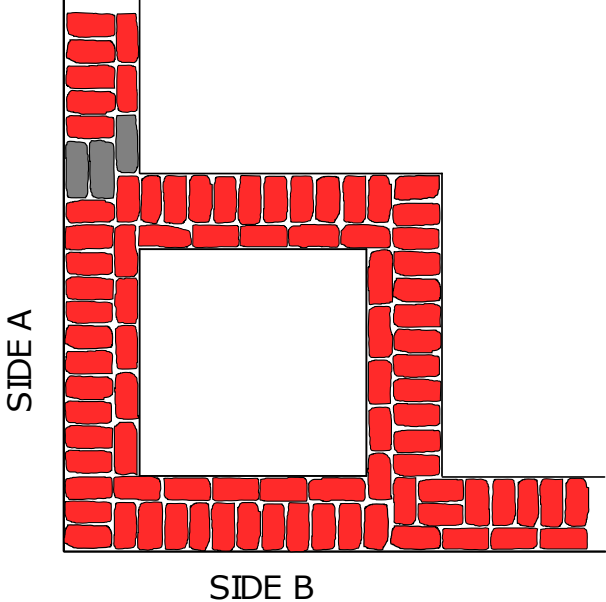
BL1 - Base Layer 1  
Block type: St - Sp1



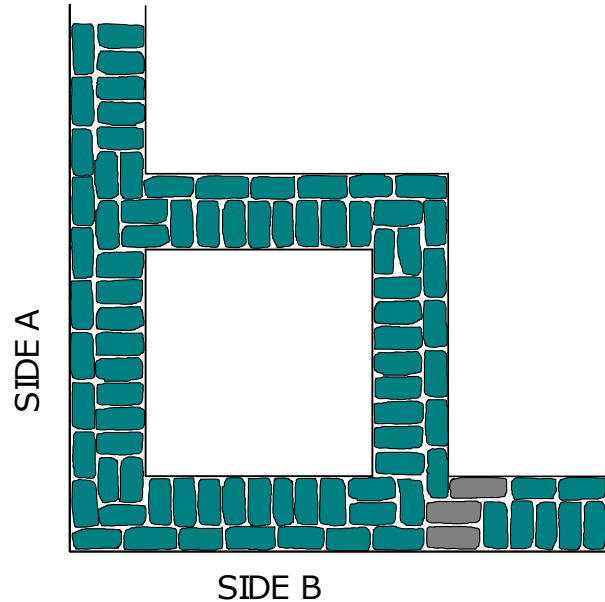
BL2 - Base Layer 2  
Block type: St - Sp1



BL3 - Base Layer 3  
Block type: St - Sp1



BL4 - Base Layer 4  
Block type: St - Sp1



DESIGN DRAWINGS

RESEARCH TEAM:

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UNICH:  
Prof. M.G. Masciotta

LNEC:  
Laboratório Nacional  
de Engenharia Civil  
(Lisboa, PT)

DESCRIPTION:

**Masonry tower. Stones texture.**

MATERIALS:

Concrete: Rck 30  
Rebars: FeB450C  
Masonry blocks: Limestone  
Mortar: Lime mortar  
- Max aggregates  
granulometry: 1 mm  
- Max compressive strength: 5 MPa  
(M5 type)

Suggested products:  
- KIMIA Limepor MT/F  
- Kerakoll Biocalce Pietra

DATE: March 2024

REV 01: February 2025

REV 02: October 2025

REV 03: November 2025

REV:

SCALE:

**1:20**

TAB#:

**2**