



Budapest University of Technology and Economics
Faculty of Architecture Engineering
Department of Building Constructions



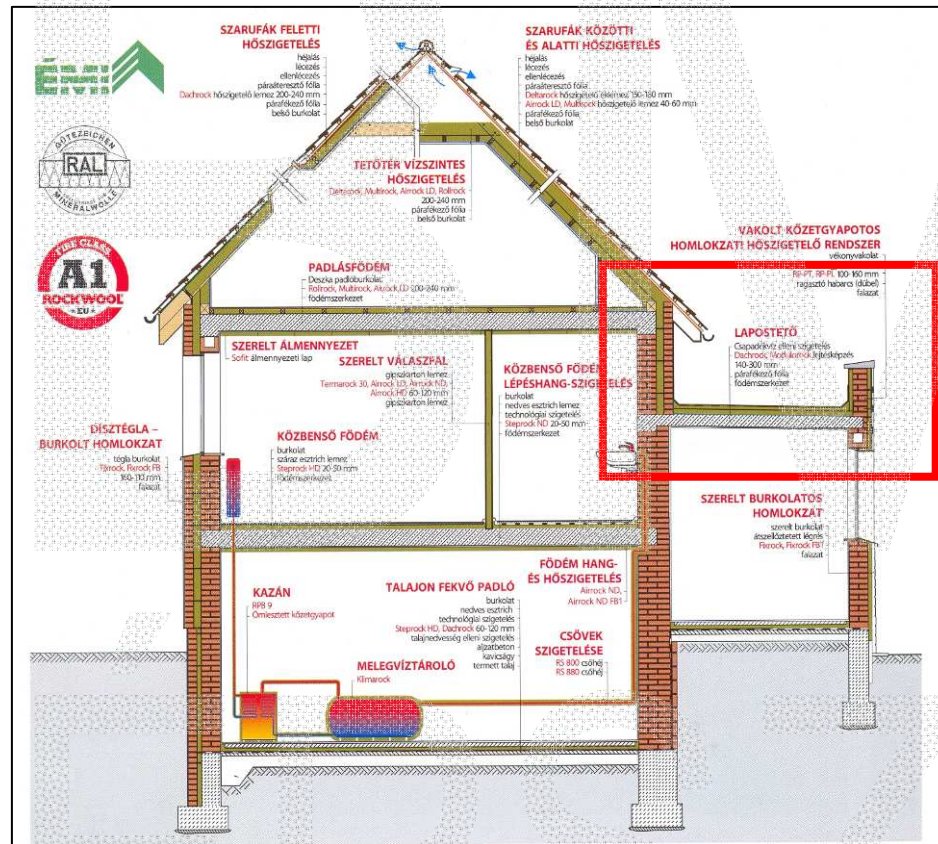
NON EXPLOITED FLAT ROOFS

DETAILS

Horváth Sándor - Fülöp Zsuzsanna Ph.D

Budapest 2017.

STRUCTURAL CONNECTIONS



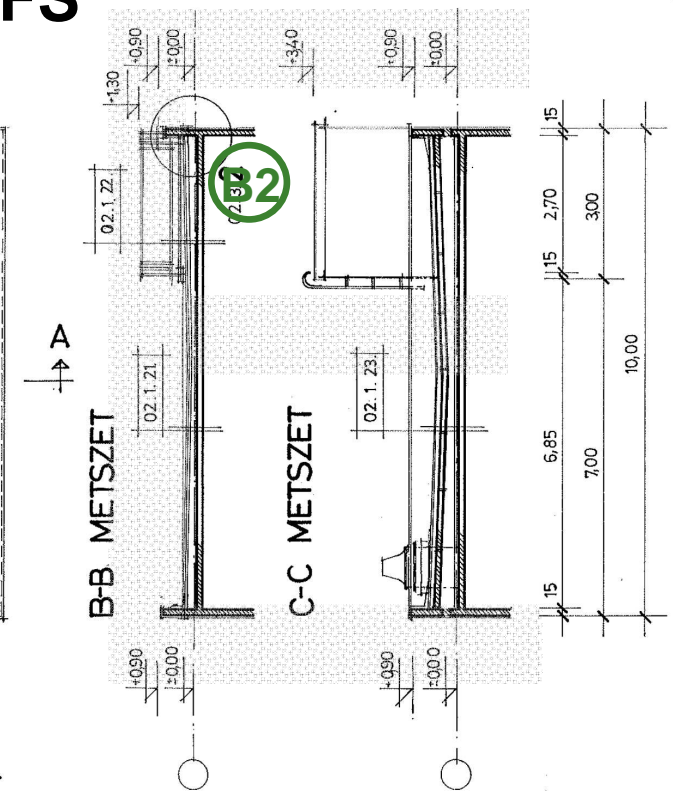
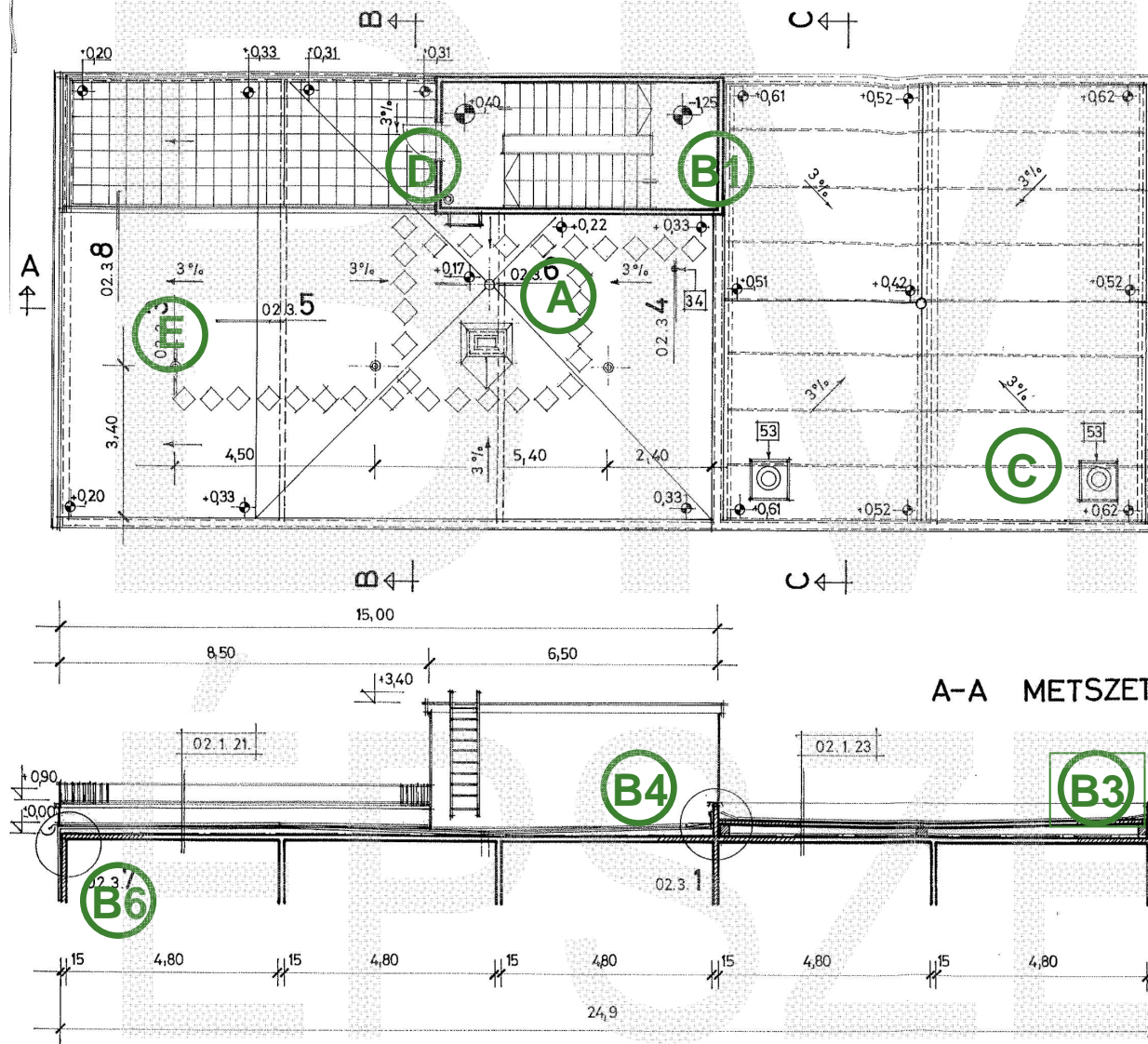
FLAT ROOFS



EVALUATION IN THE CONTEXT OF THE WHOLE BUILDING



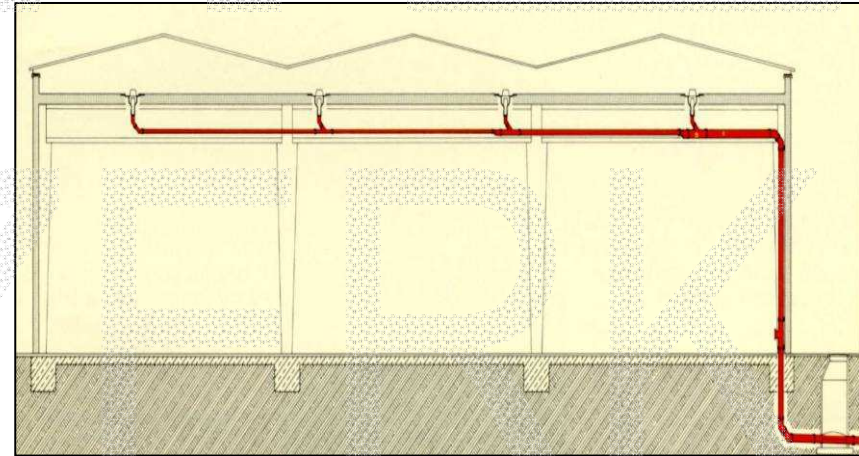
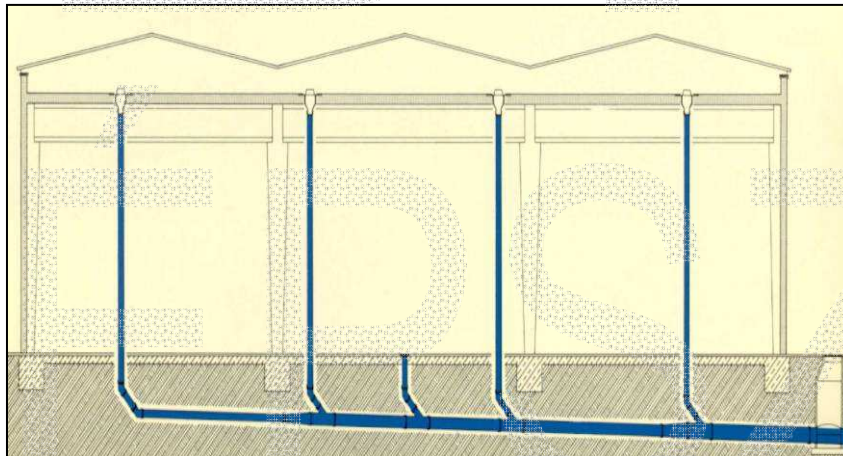
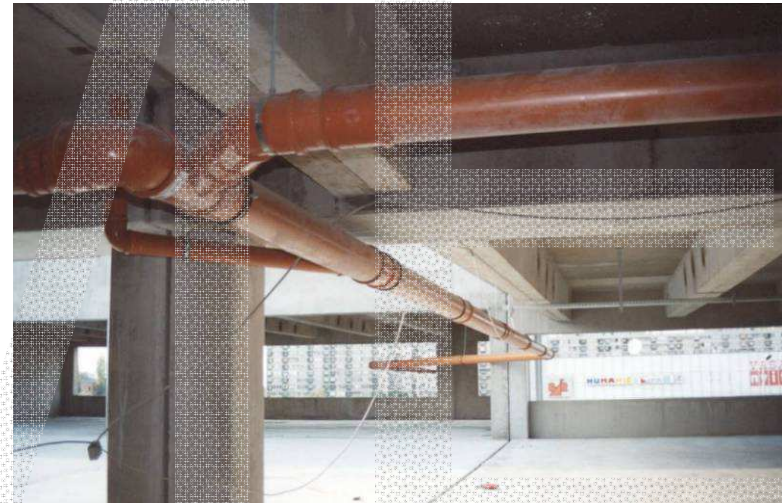
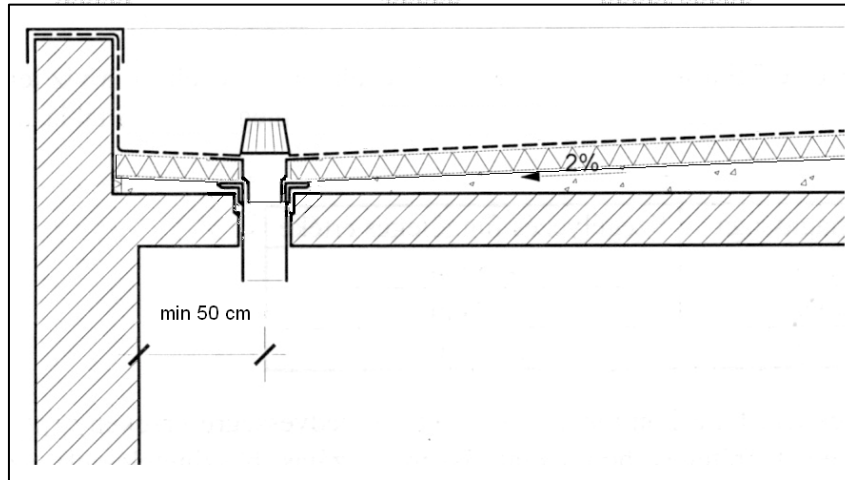
DETAILS OF FLATROOFS



A gully
B flashing
C skylight
D door
E pipes

INTERNAL DRAIN SYSTEM

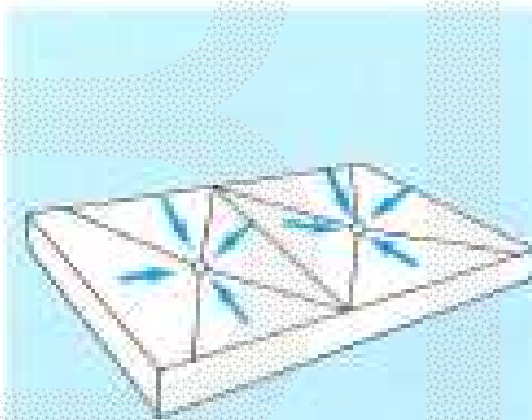
Gully



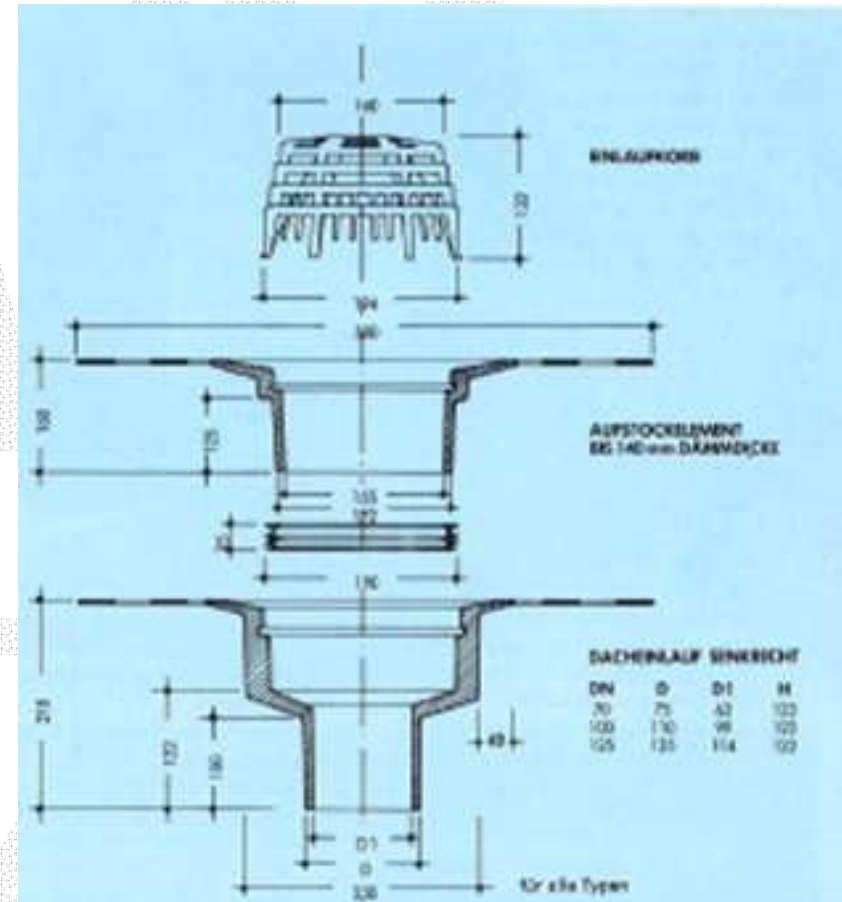
FLAT ROOFS

RAINWATER DRAIN SYSTEM

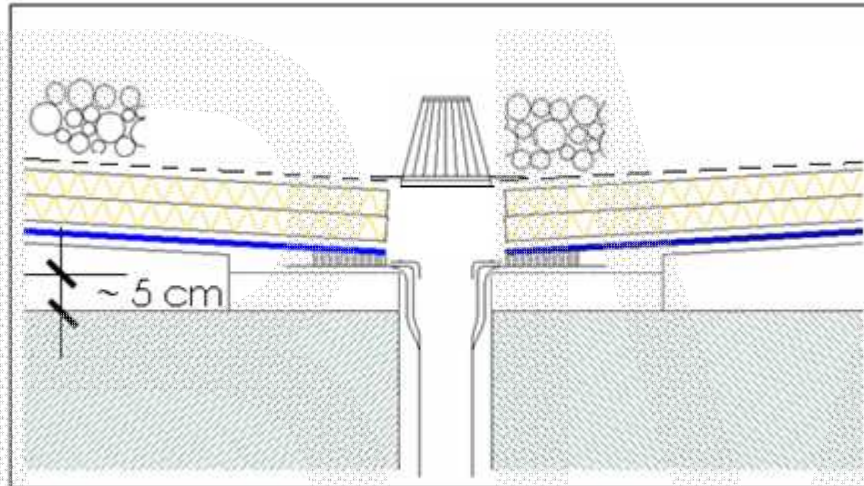
Internal outlet: gully



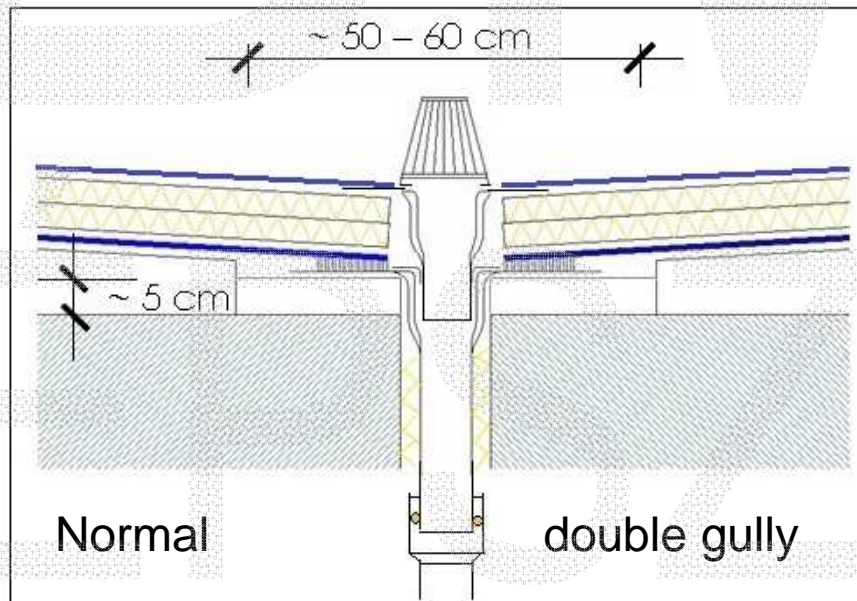
awaplan-Dachablauf PU DBGM e.
Prüfzeichen PA12661



FLASHING OF GULLIES

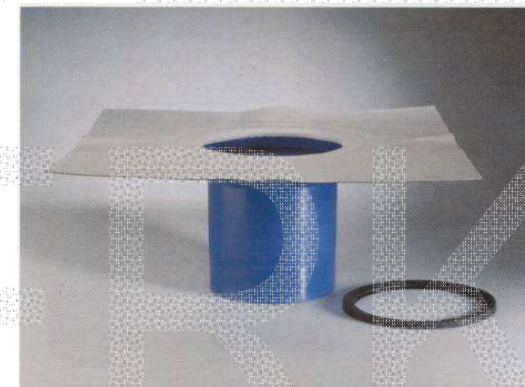
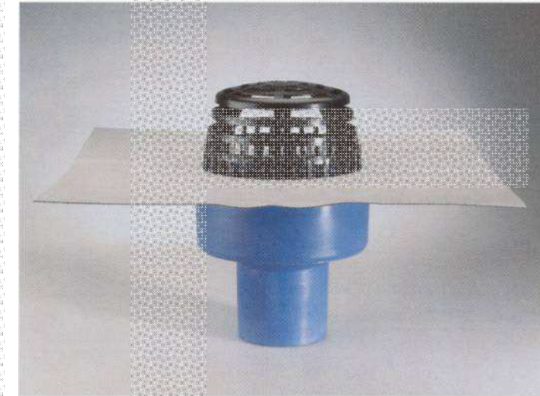


Inverted – single gully



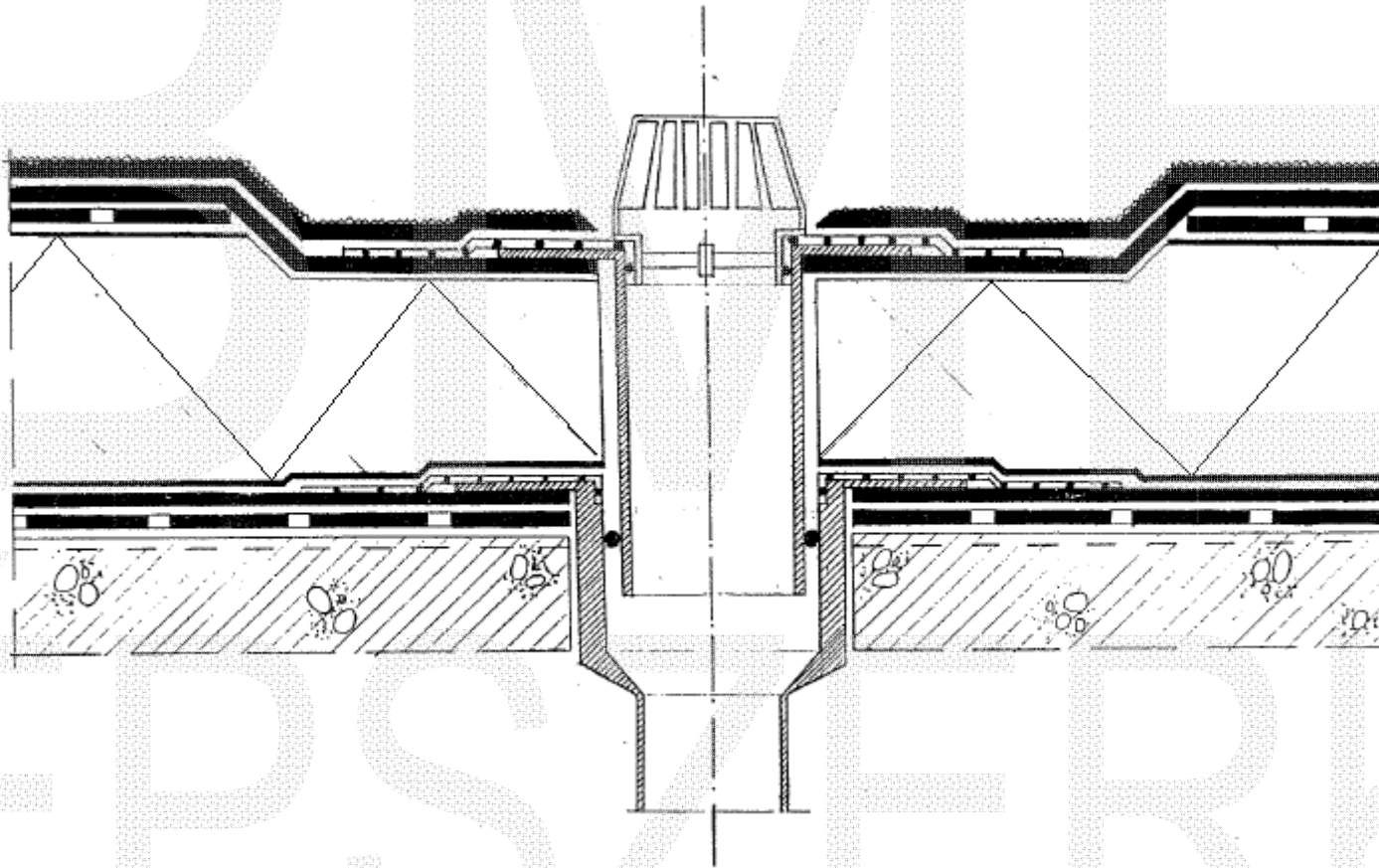
Normal

double gully



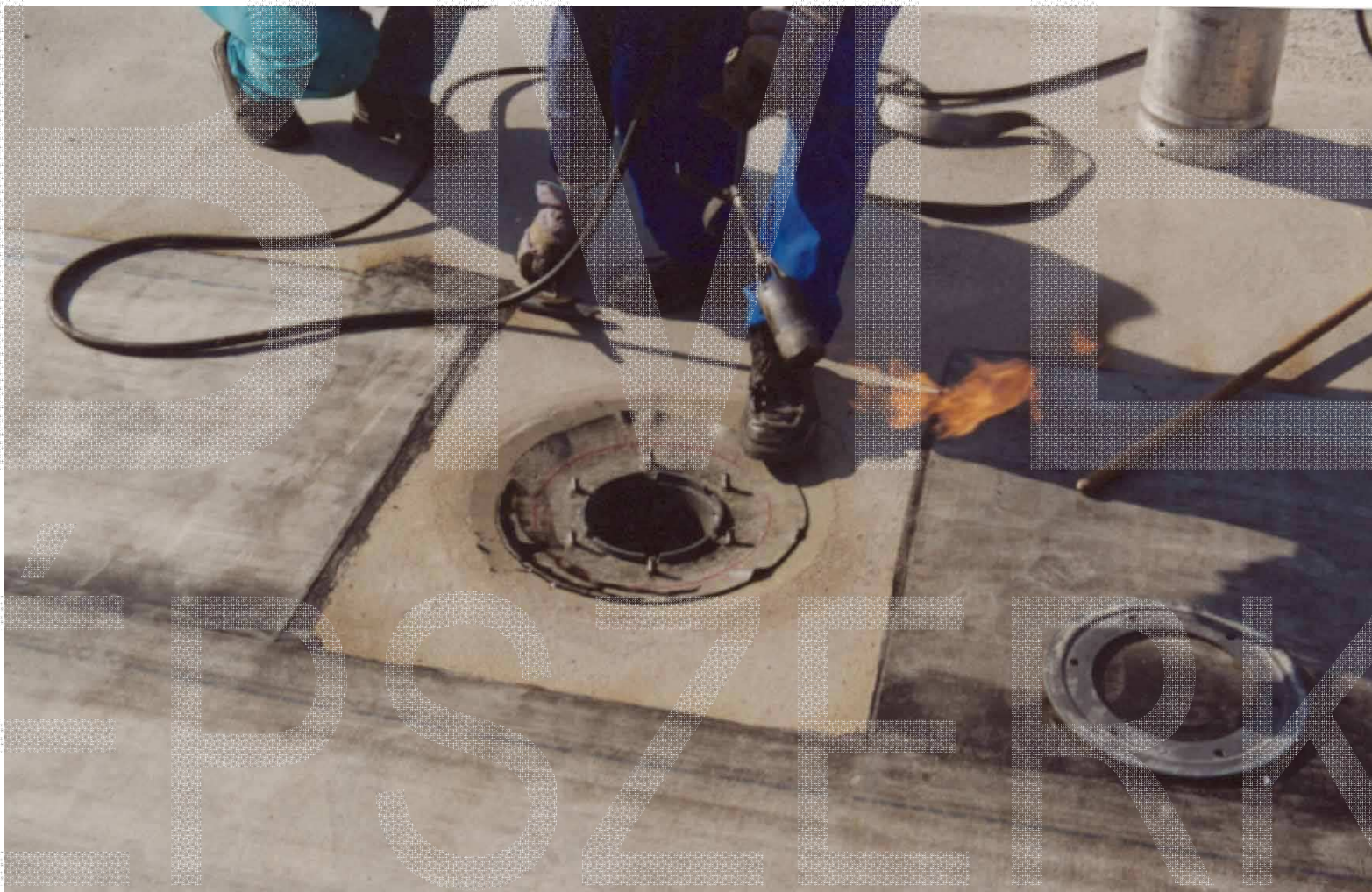
FLASHING OF GULLIES

BITUMINOUS ROOFING MEMBRANES



FLASHING OF GULLIES

BITUMINOUS ROOFING MEMBRANES



FLASHING OF GULLIES

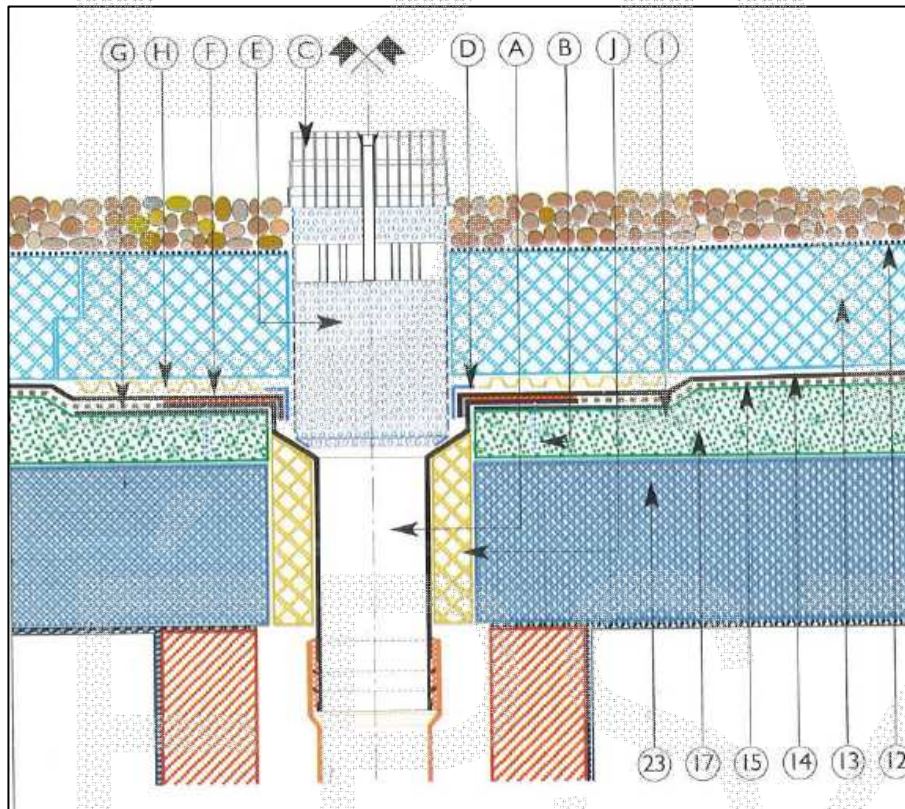
BITUMINOUS ROOFING MEMBRANES



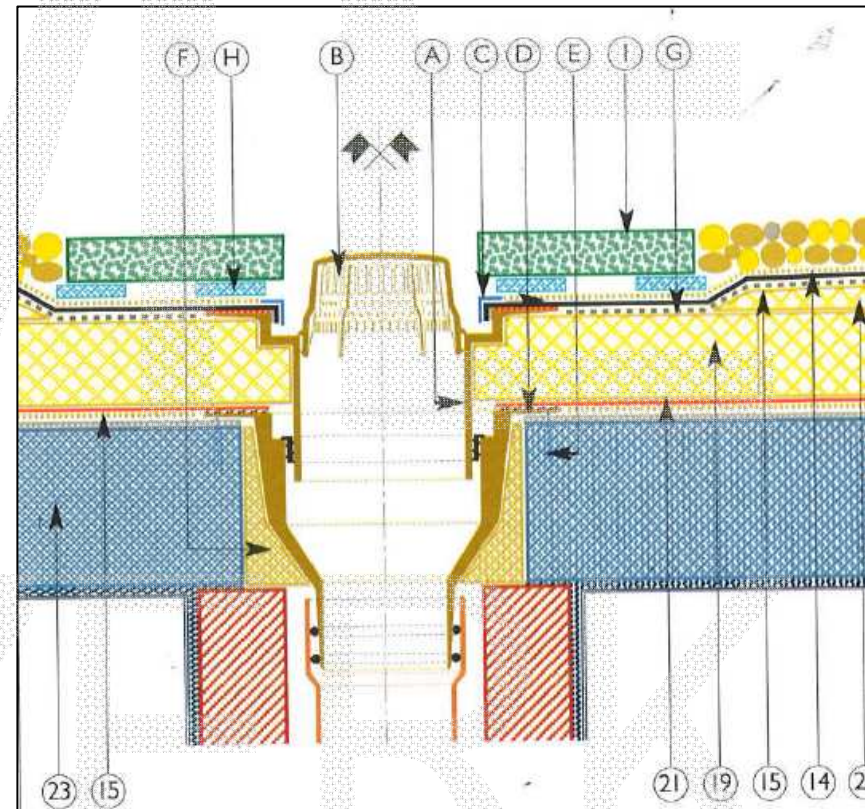
FLASHING OF GULLIES

PLASTIC ROOFING MEMBRANES

inverted



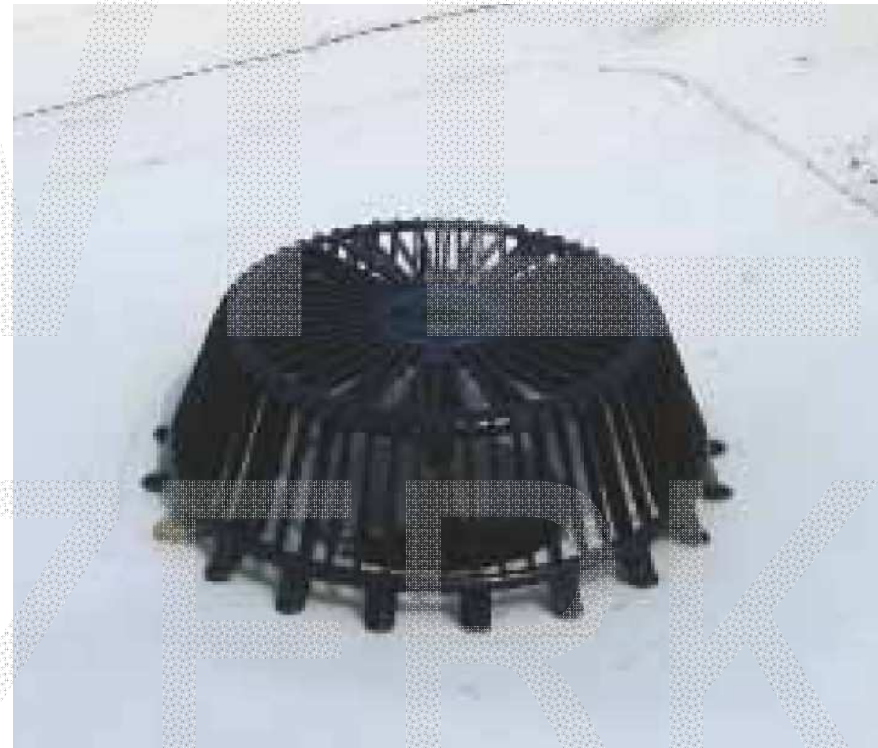
normal



FLASHING OF GULLIES

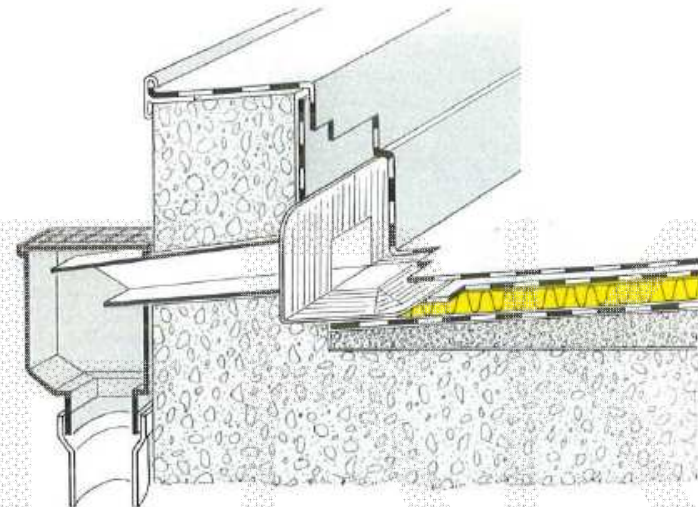
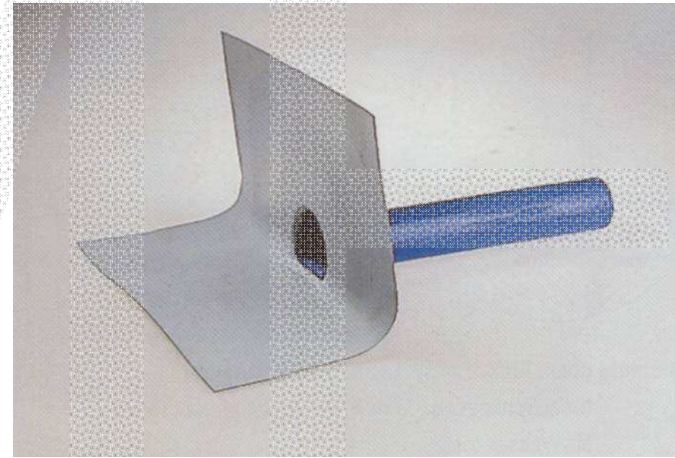
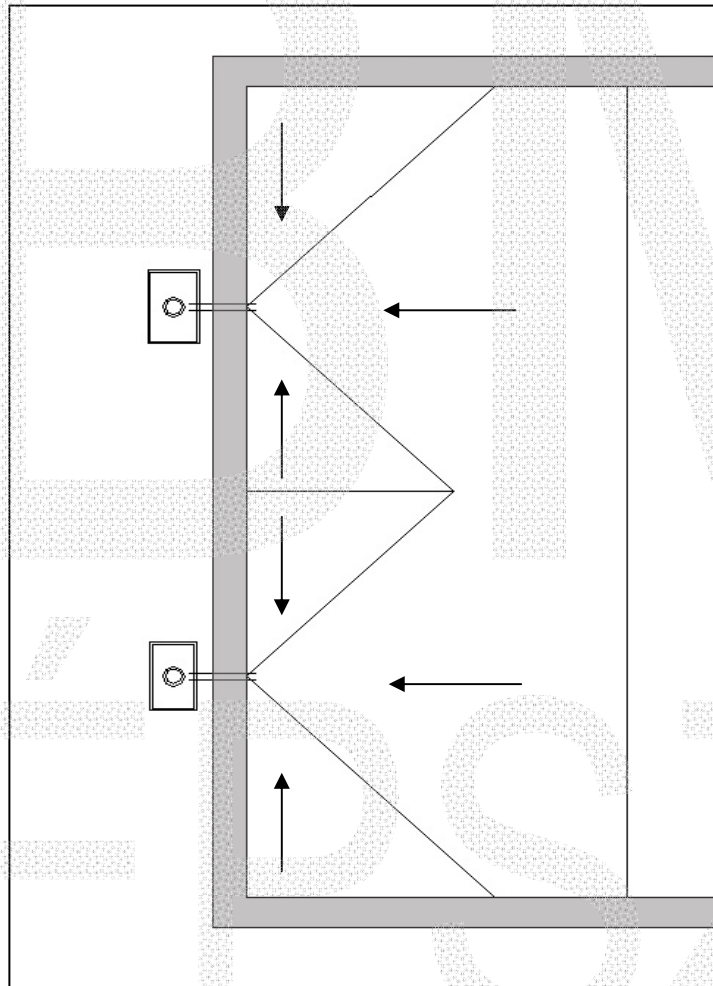


PLASTIC ROOFING MEMBRANES



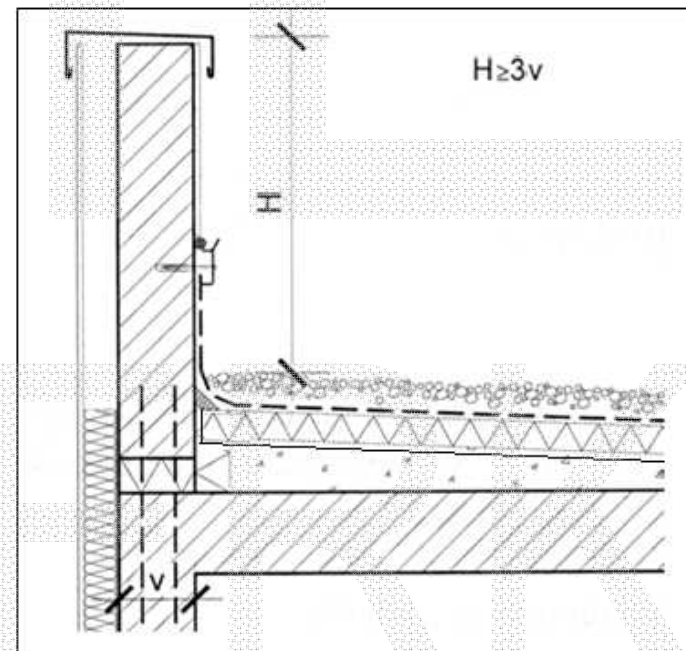
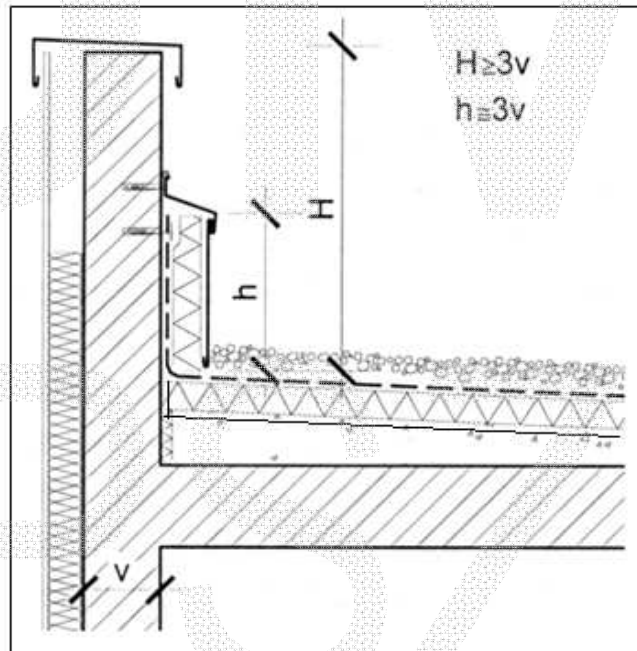
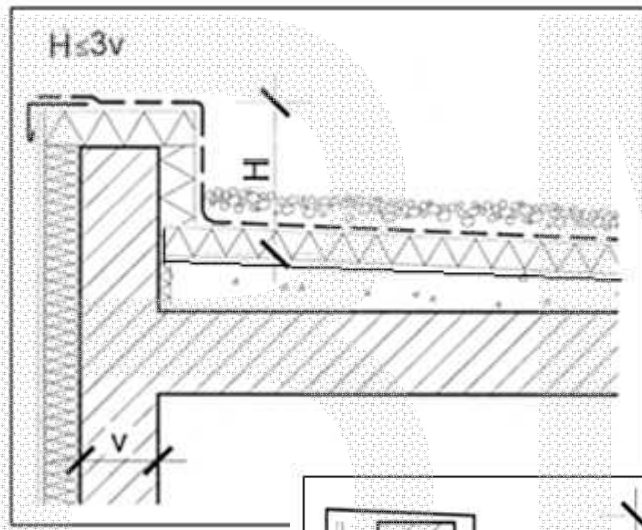
FLAT ROOFS

EXTERNAL POINT WISE DRAIN SYSTEM



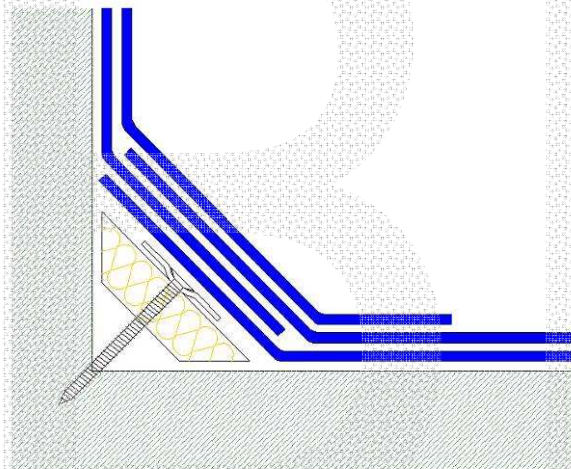


FLASHING OF PARAPET WALL

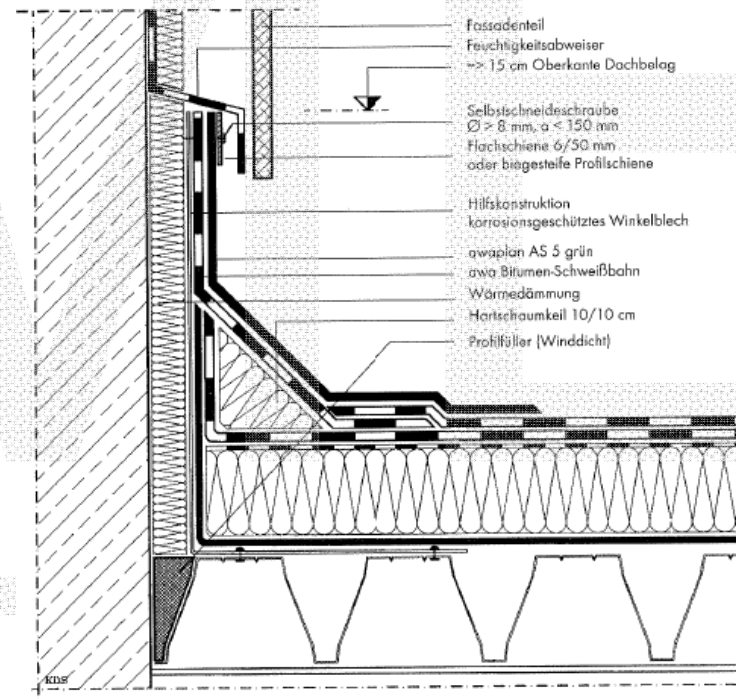
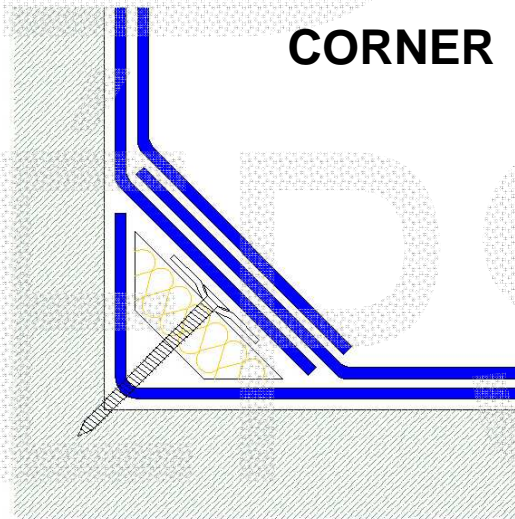


FLASHING

BITUMINOUS ROOFING MEMBRANES



CORNER



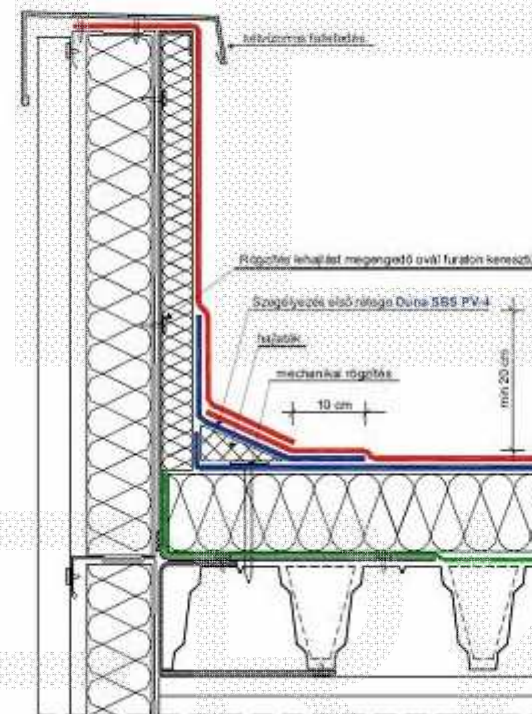
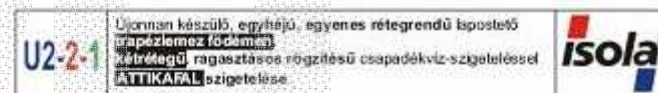
overlapping 8-10 cm
corner element !



FLASHING OF PARAPET WALL

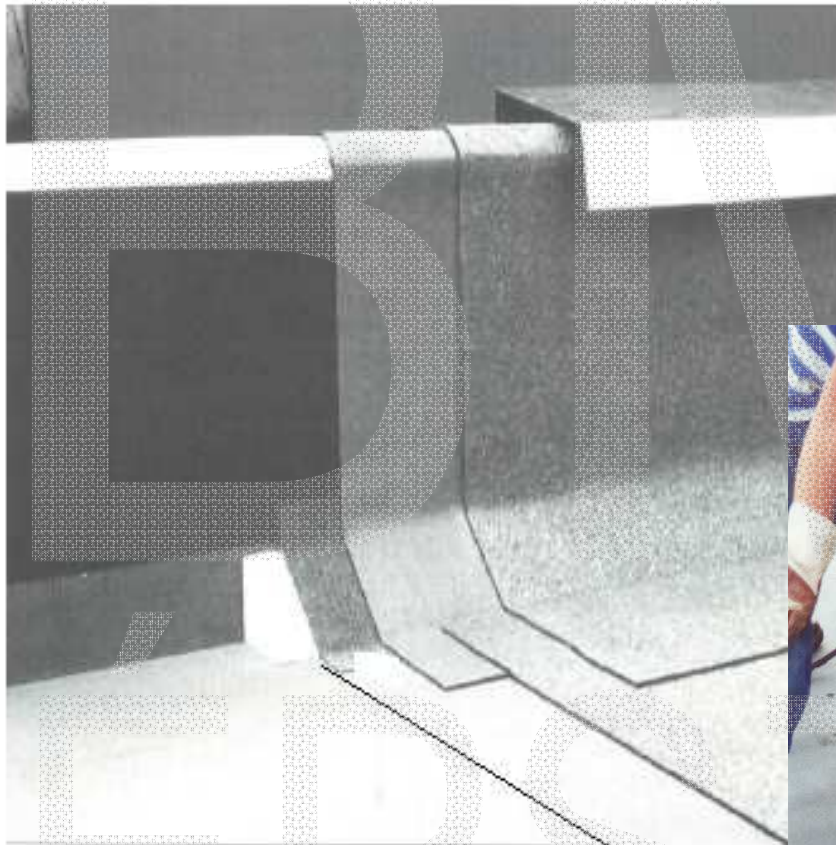


•Non trafficked flat roof



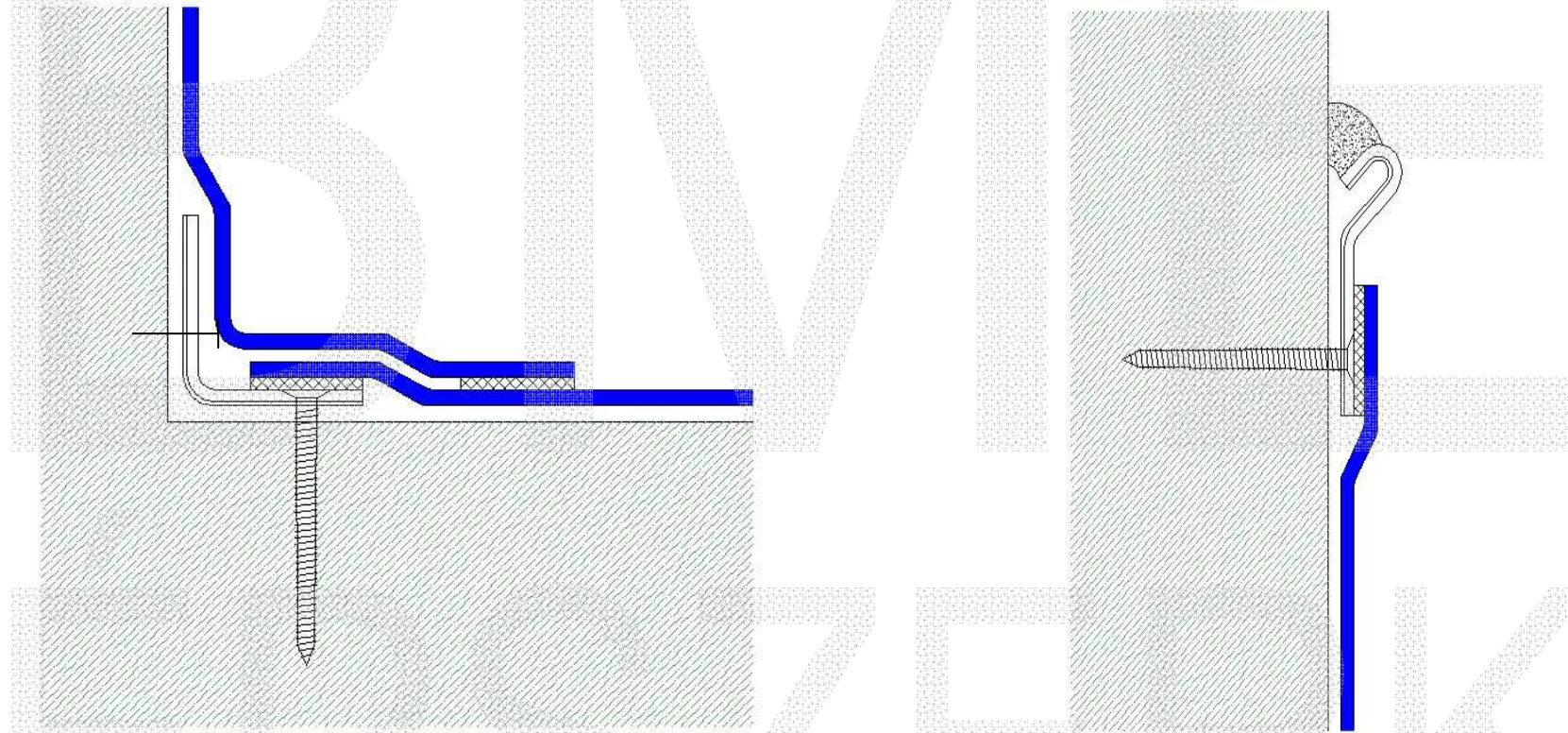
FLASHING

BITUMINOUS ROOFING MEMBRANES



FLASHING

PLASTIC ROOFING MEMBRANES

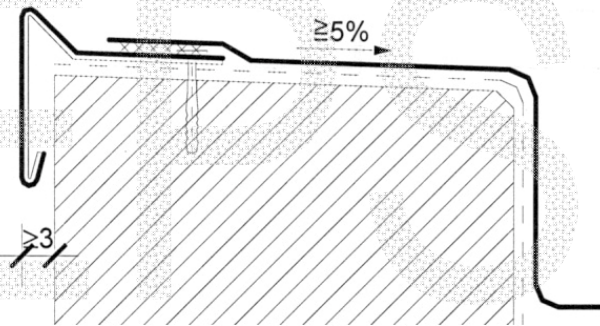
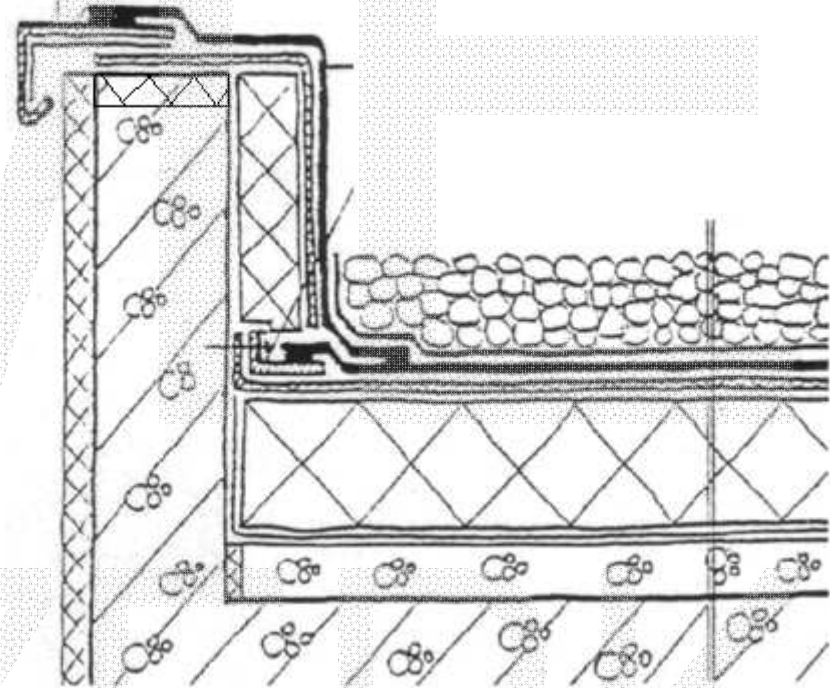


fixing at corner and on the wall by PVC laminated metal strip



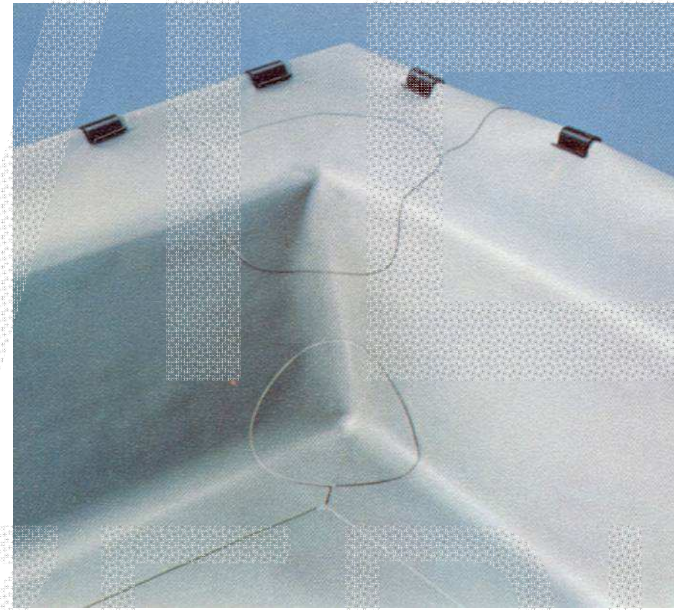
FLASHING OF PARAPET WALL

PLASTIC (PVC) ROOFING MEMBRANES



WATERPROOFING LAYER

PLASTIC (PVC) ROOFING MEMBRANES

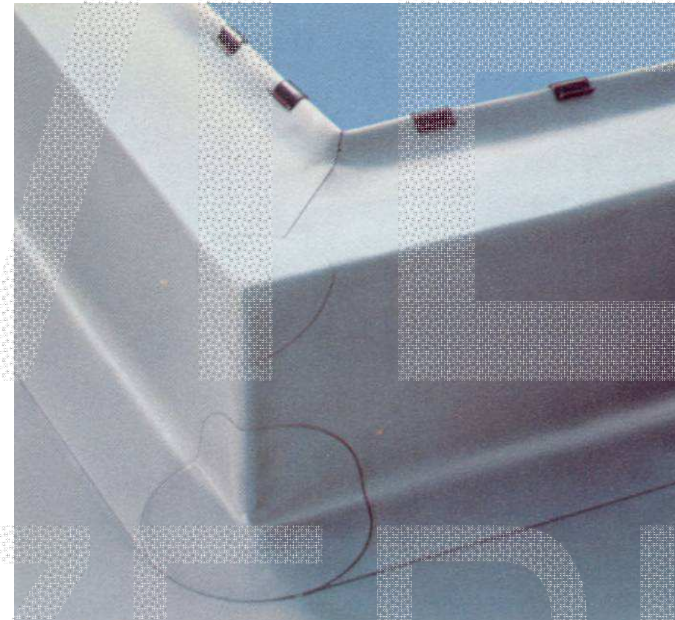
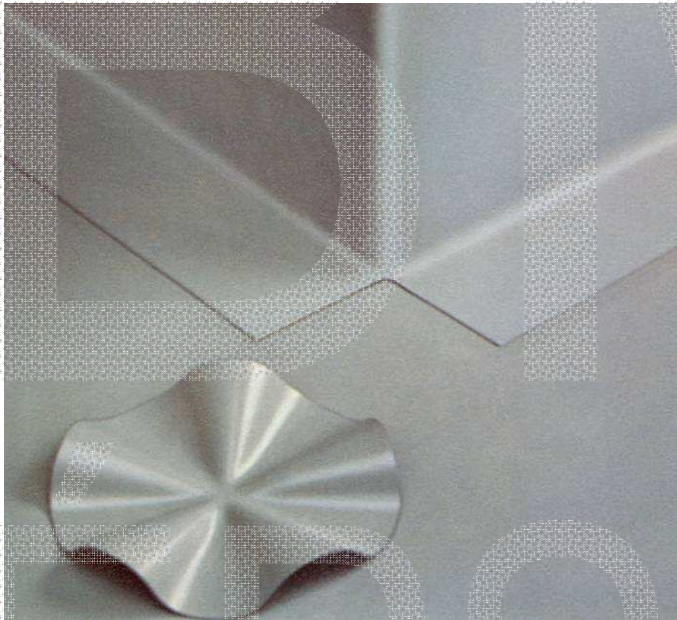


INTERNAL CORNER



WATERPROOFING LAYER

PLASTIC (PVC) ROOFING MEMBRANES

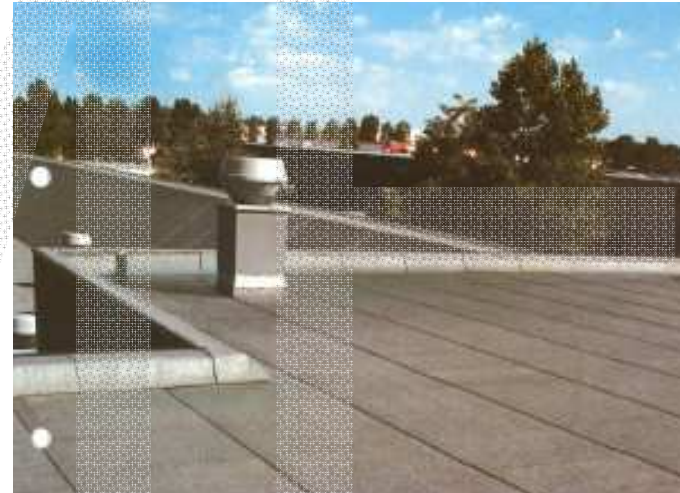
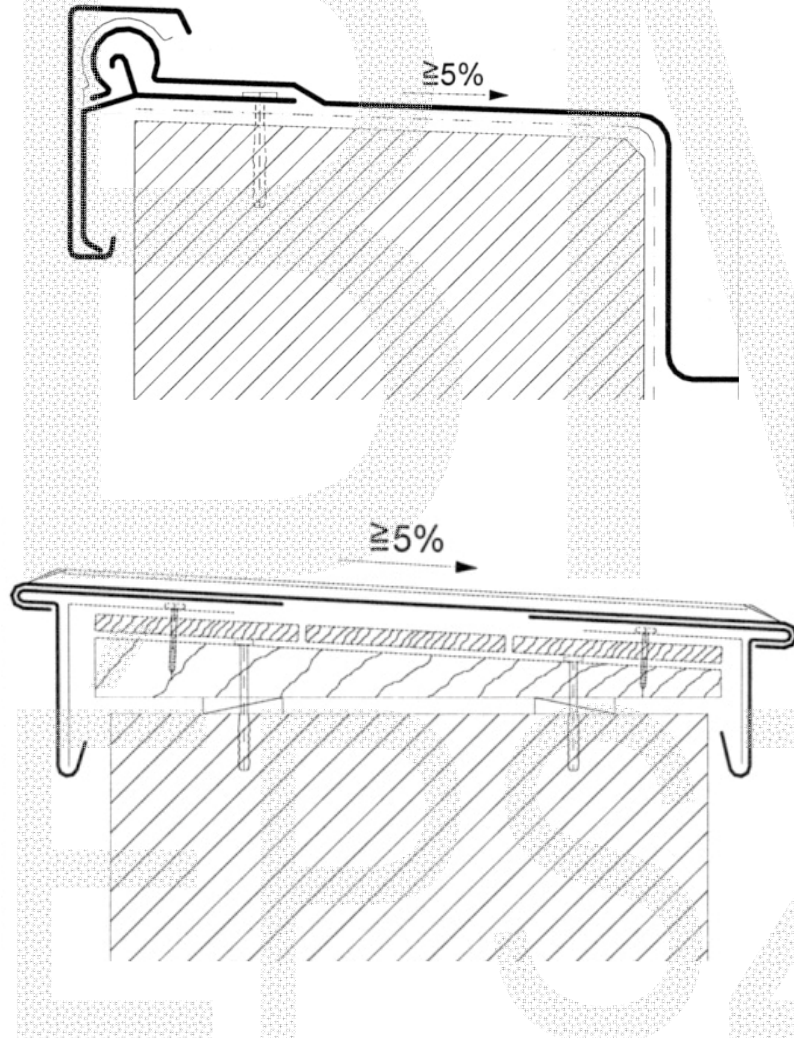


EXTERNAL CORNER



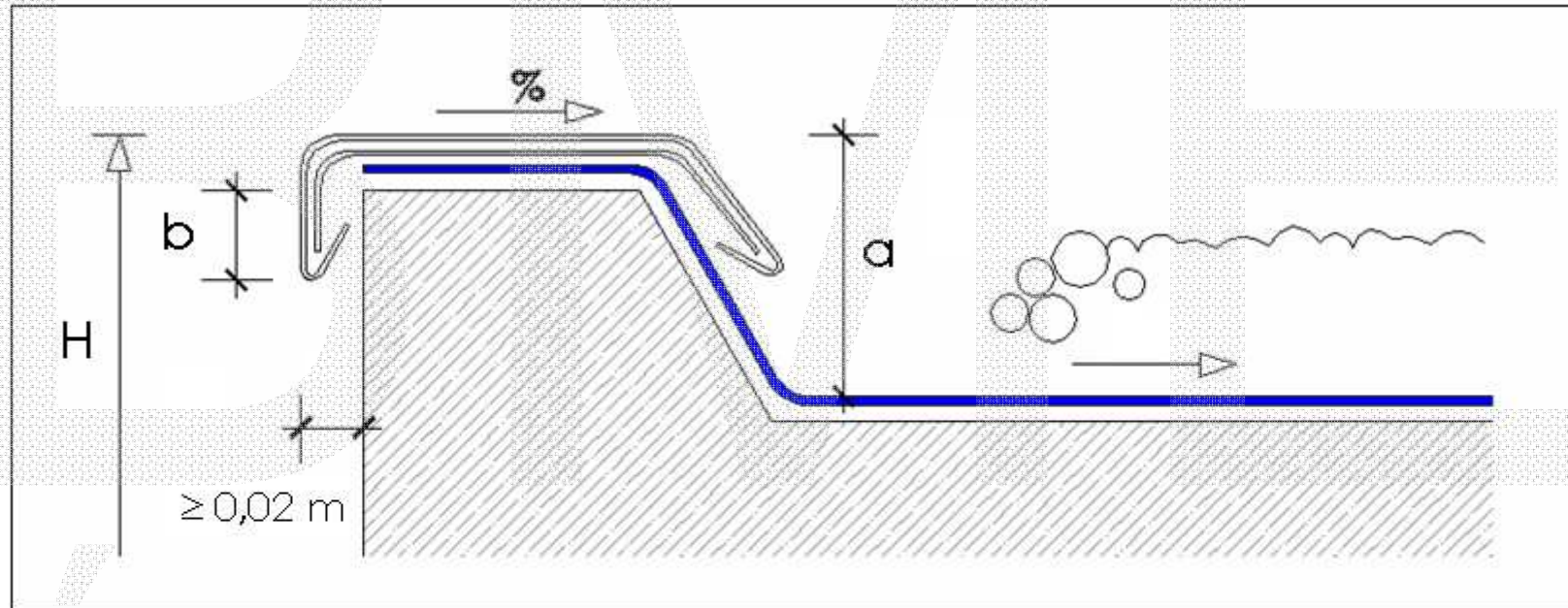
NON EXPLOITED FLAT ROOFS

CAP OF PARAPET WALL



FLASHING OF ROOF EDGE

rules



$\alpha \leq 5^\circ \rightarrow a \geq 0,10 \text{ m}$

$\alpha > 5^\circ \rightarrow a \geq 0,05 \text{ m}$

$H \leq 8 \text{ m} \rightarrow b \geq 0,05 \text{ m}$

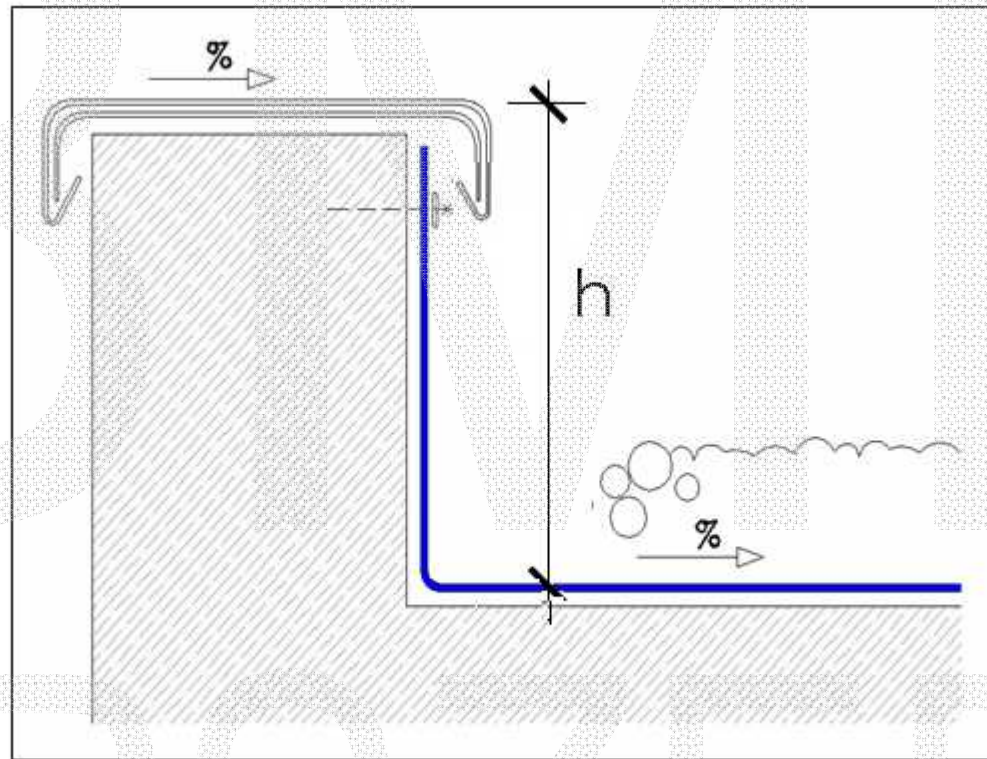
$20 \text{ m} > H > 8 \text{ m} \rightarrow b \geq 0,08 \text{ m}$

$20 \text{ m} \leq H \rightarrow b \geq 0,10 \text{ m}$



FLASHING OF PARAPET WALL

rules

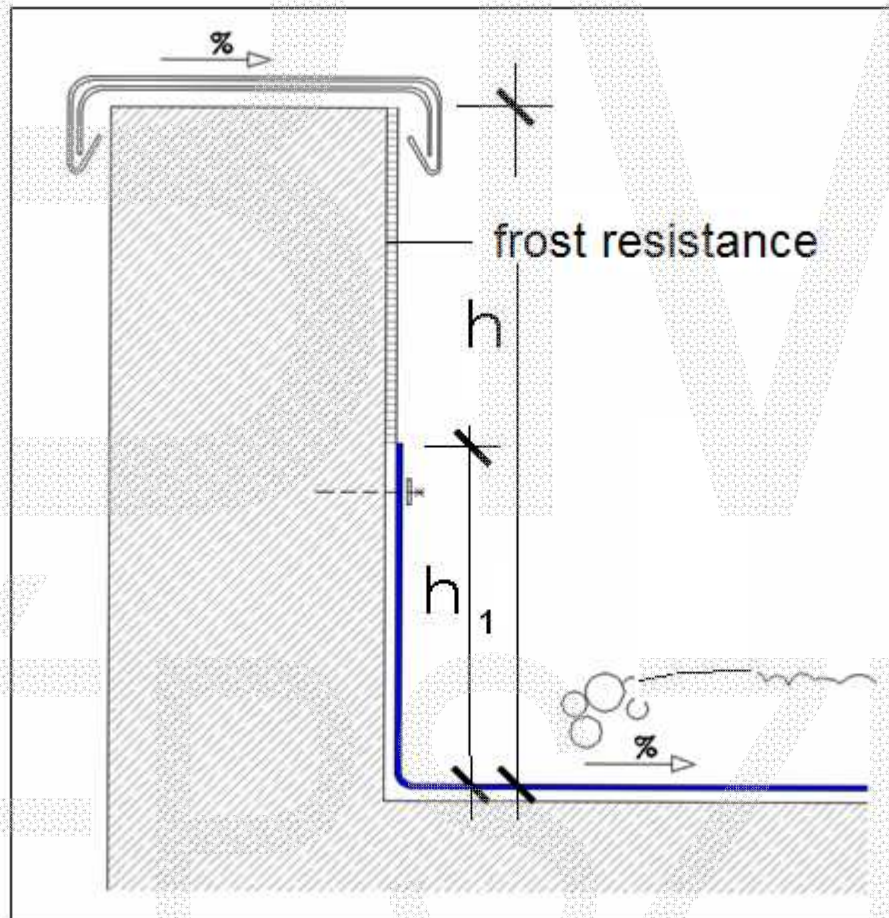


$$25 \text{ cm} < h \leq \text{cca } 80 \text{ cm}$$



FLASHING OF PARAPET WALL

rules



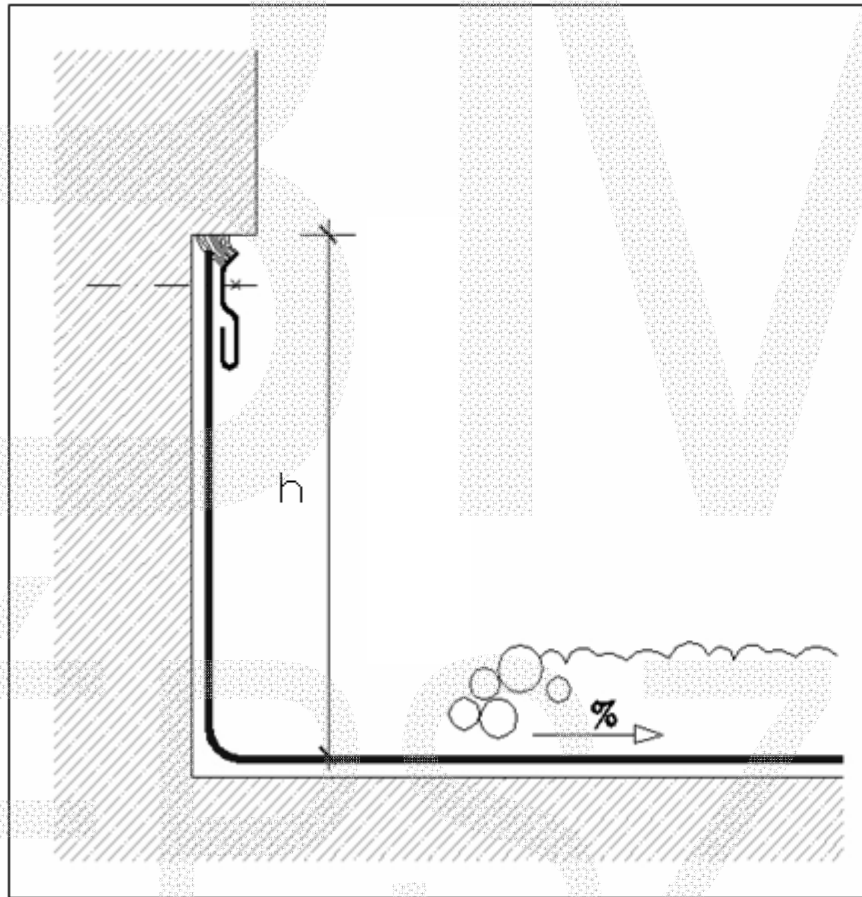
$$h > \text{cca } 80 \text{ cm}$$

$$h_1 \geq 25 \text{ cm}$$



FLASHING OF ABUTMENT WALL

rules

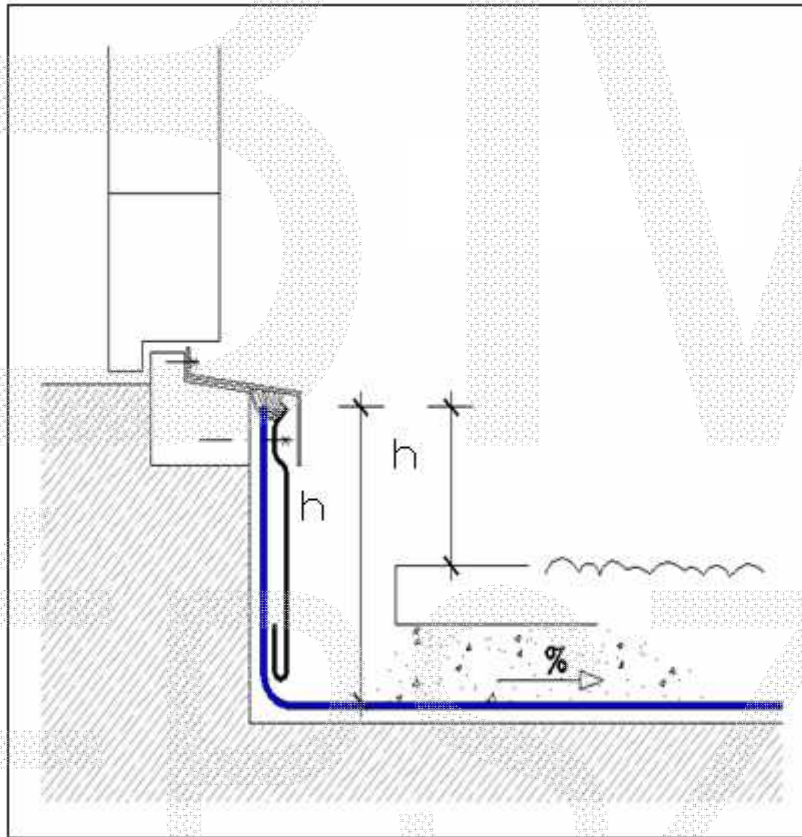


$$h \geq 0,25 \text{ m}$$



FLASHING AT THRESHOLD

rules



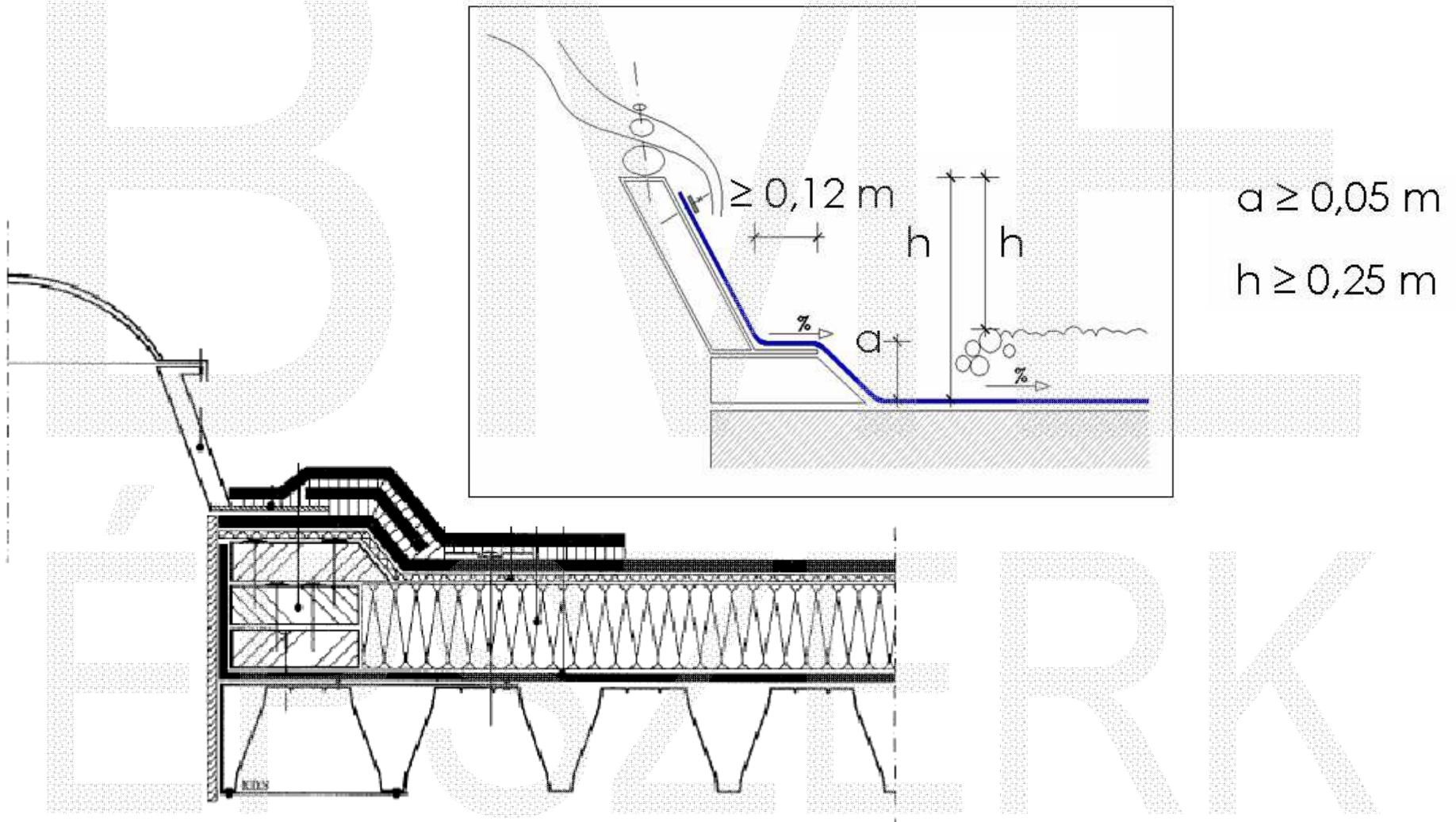
$$h \geq 0,25 \text{ m}$$



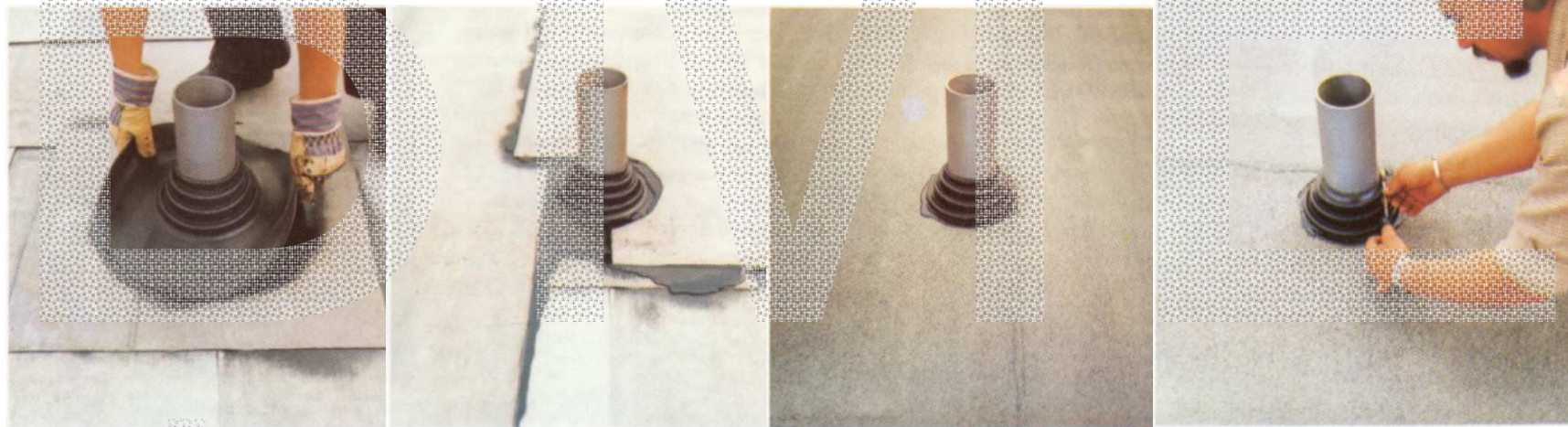
FLASHING AT TRESHOLD



FLASHING AT SKYLIGHT



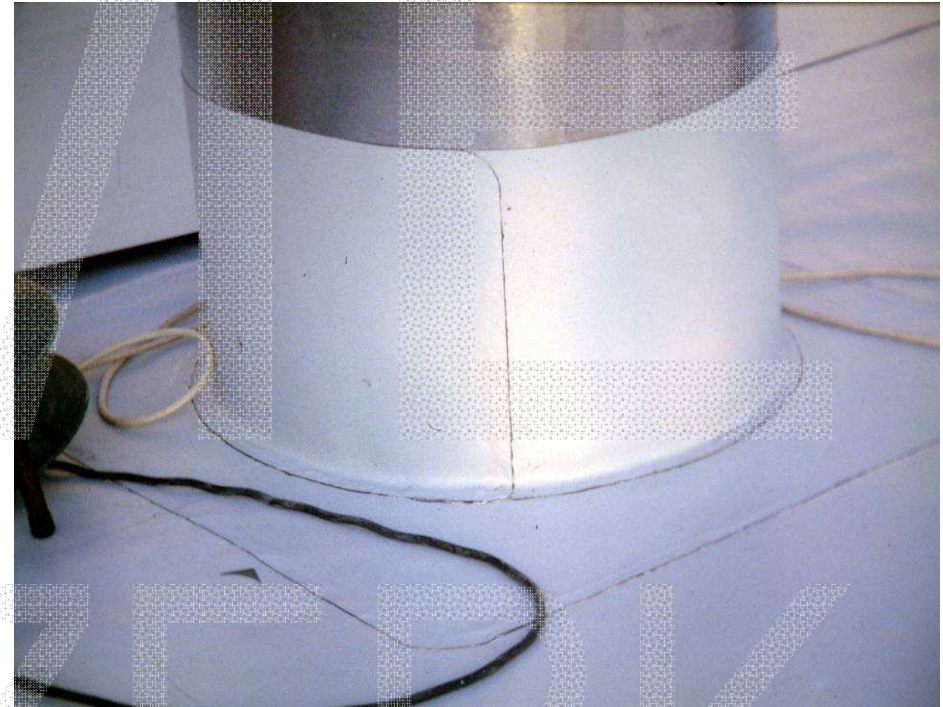
PIPE FLASHING



BITUMINOUS ROOFING MEMBRANES



PIPE FLASHING



PLASTIC (PVC) ROOFING MEMBRANES



THANK YOU FOR YOUR
ATTENTION!

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