



Warsaw, 2023-12-21

CARBOLINE POLSKA Sp. z o. o.
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POLAND

ITB Work No. 03079.3/23/Z00NZZ

Annex No. 1
to the Classification No. 1233.4/15/Z00NP
for Mixed penetration seal of CARBOLINE POLSKA Company

Classification No. 1233.4/15/Z00NP is hereby amended as follows:

- Figures No. 2 and 3 are replaced by those attached to this Annex

Signed:

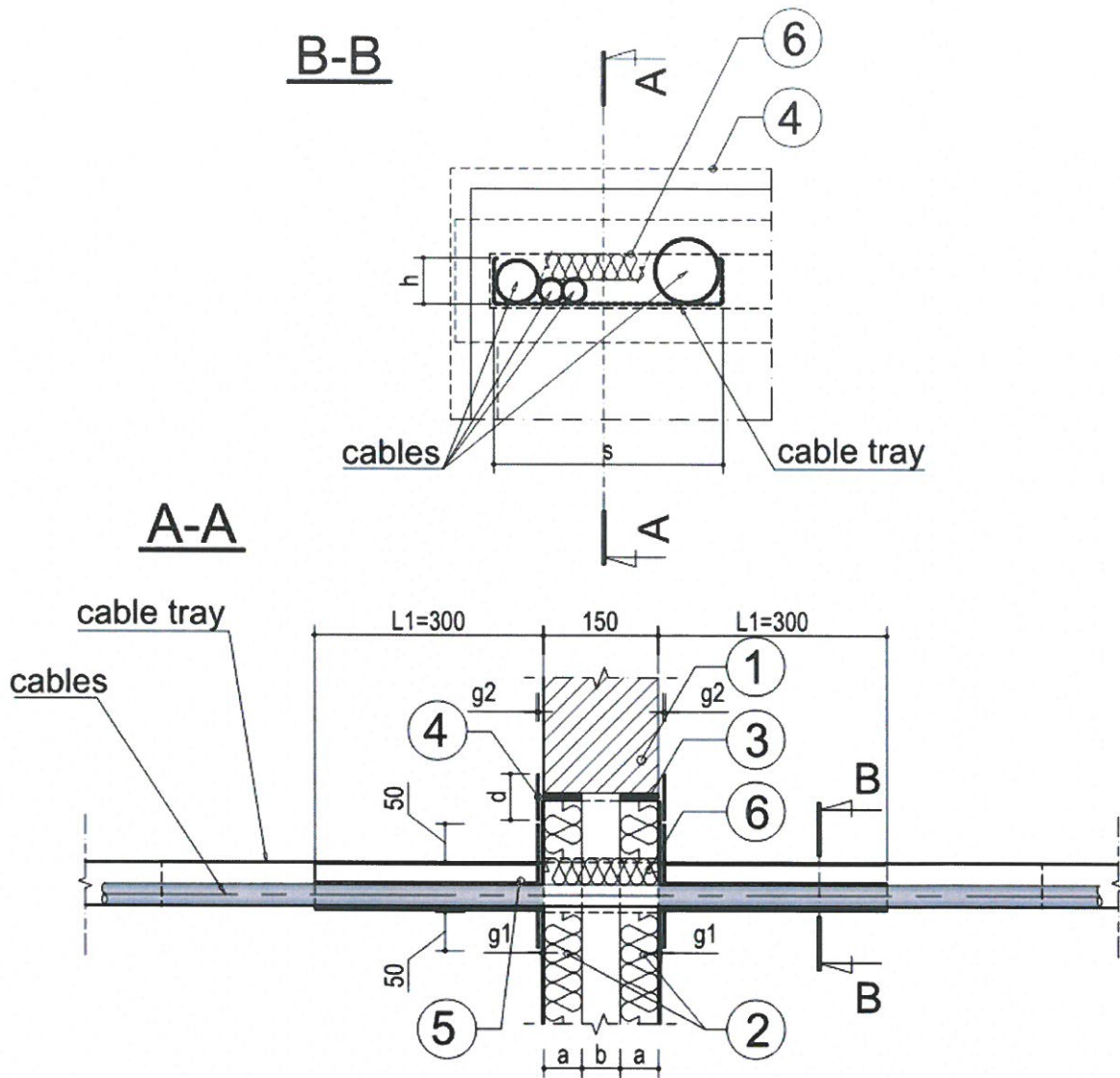
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Verified:

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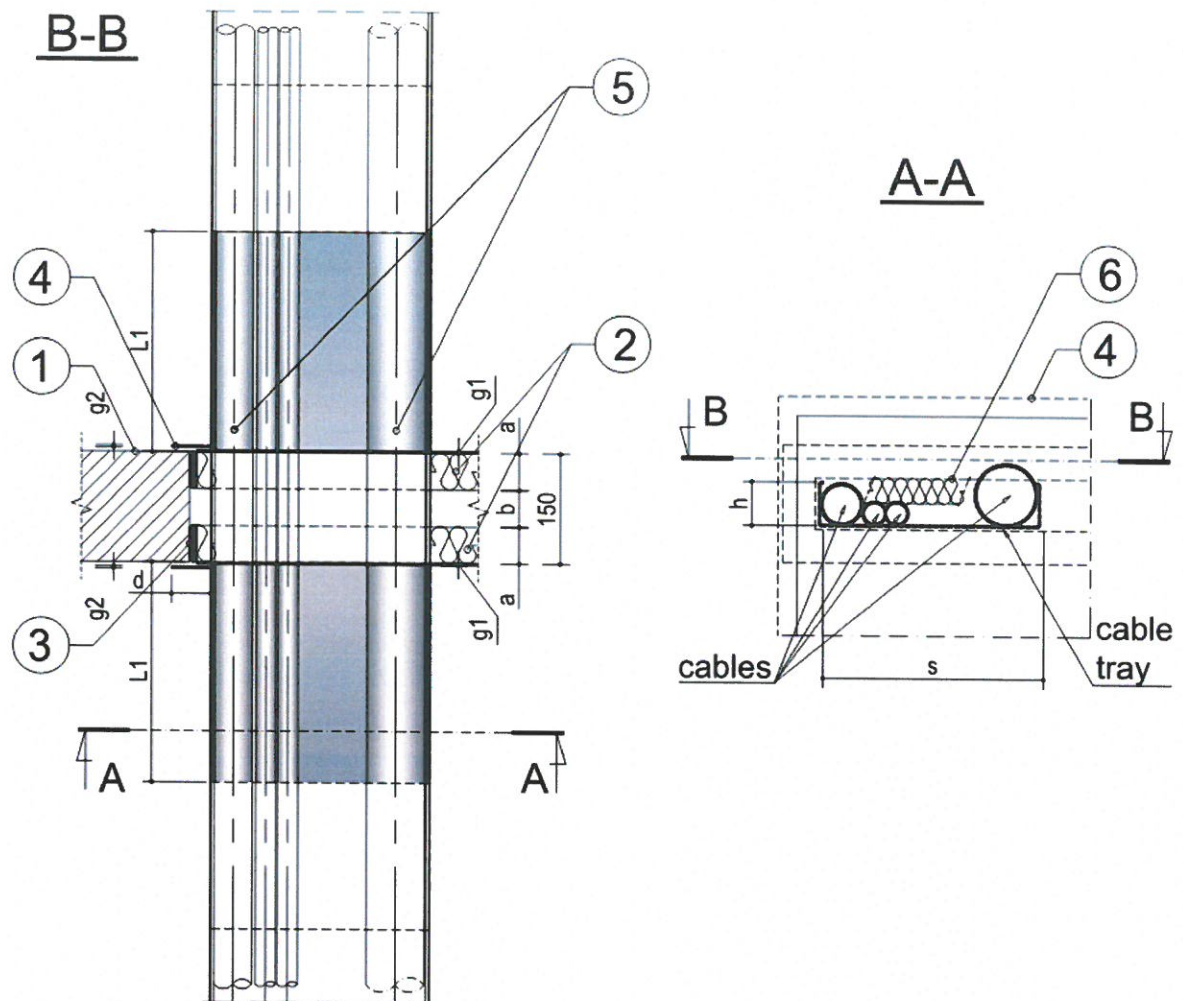
Approved:

Bartłomiej Papis,
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Head of ITB Fire Research
Department
(signature)



- 1 - Rigid wall supporting construction, density of min. 600 kg/m^3 and thickness of min. 150 mm.
- 2 - 2 mineral wool boards density of min. 150 kg/m^3 , thickness of $a = \text{min. } 50 \text{ mm}$ (covered with Flame Cabel A paste, thickness of $g1 = \text{min. } 1,2 \text{ mm}$); $b = \text{min. } 50 \text{ mm}$ (space between the boards).
- 3 - Flame Cabel A paste; infill of the gap width of $0,5 - 50 \text{ mm}$ between the wall and mineral wool board.
- 4 - Flame Cabel A paste, length $d = \text{min. } 60 \text{ mm}$, thickness $g2 = \text{min. } 0,6 \text{ mm}$, placed on the perimeter of the mixed penetration seal.
- 5 - Flame Cabel paint, both sides of the penetration seal, cables and cable trays (dimensions of $h \times s$) coating thickness of min. 1,2 mm and length of $L1 = \text{min. } 300 \text{ mm}$.
- 6 - Mineral wool, density of min. 40 kg/m^3 .

Fig. 2 Mixed penetration seal of CARBOLINE POLSKA company in wall, cables sealed with Flame Cabel paint



- 1 - Rigid floor supporting construction, density of min. 1700 kg/m^3 and thickness of min. 150 mm.
- 2 - 2 mineral wool boards density of min. 150 kg/m^3 , thickness of $a = \text{min. } 50 \text{ mm}$ (covered with Flame Cabel A paste, thickness of $g1 = \text{min. } 1,2 \text{ mm}$); $b = \text{min. } 50 \text{ mm}$ (space between the boards).
- 3 - Flame Cable A paste; infill of the gap width of 0,5 – 50 mm between the wall and mineral wool board.
- 4 - Flame Cabel A paste, length $d = \text{min. } 60 \text{ mm}$, thickness $g2 = \text{min. } 0,6 \text{ mm}$, placed on the perimeter of the mixed penetration seal.
- 5 - Flame Cabel paint, both sides of the penetration seal, cables and cable trays (dimensions of $h \times s$) coating thickness of min. 1,2 mm and length of $L1 = \text{min. } 300 \text{ mm}$.
- 6 - Mineral wool, density of min. 40 kg/m^3 .

Fig. 3 Mixed penetration seal of CARBOLINE POLSKA company in floor,
cables sealed with Flame Cabel paint

