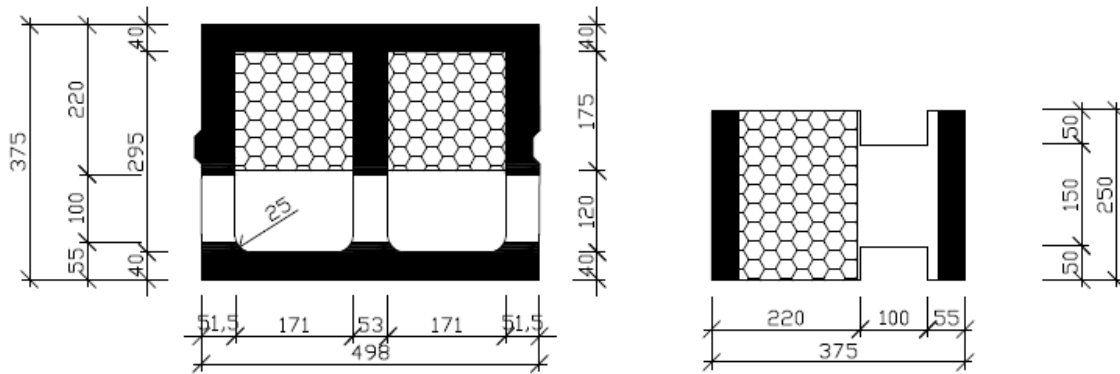


Durisol blokelių varžos skaičiavimas:

Durisol DSs 37.5/12



- Varžos skaičiavimas (NEOPORAS):

$$R_{A-A} = \frac{d_{pol}}{\lambda_{pol}} + \frac{d_{durisol}}{\lambda_{durisol}} + \frac{d_{concrete}}{\lambda_{concrete}} = \frac{0.175}{0.032} + \frac{0.08}{0.1175} + \frac{0.12}{2} = 6.210 \text{ m}^2\text{K/W};$$

$$R_{B-B} = \frac{d_{durisol}}{\lambda_{durisol}} = \frac{0.375}{0.1175} = 3.191 \text{ m}^2\text{K/W};$$

$$R_{C-C} = \frac{d_{durisol}}{\lambda_{durisol}} + \frac{d_{concrete}}{\lambda_{concrete}} = \frac{0.275}{0.1175} + \frac{0.1}{2} = 2.39 \text{ m}^2\text{K/W};$$

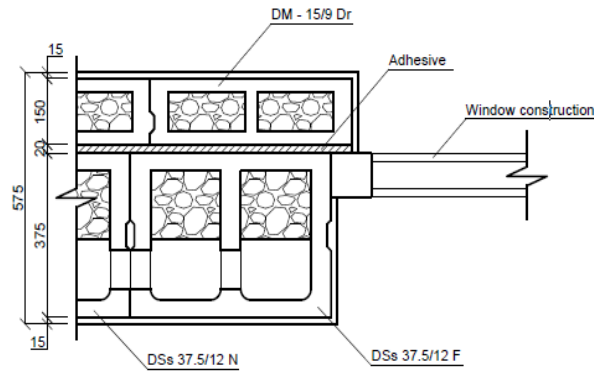
Varžos vidurkis:

$$R_b = 6.210 \cdot 0.7 + 3.191 \cdot 0.19 + 2.39 \cdot 0.11 + R_{si} + R_{se} + R_{tinko} = 4.347 + 0.606 + 0.263 + 0.04 + 0.13 + 0.3 = 5.686 \text{ m}^2\text{K/W};$$

Šilumos perdavimo koeficientas:

$$U = \frac{1}{R_b} = \frac{1}{5.686} = 0.167 \text{ W/m}^2\text{K};$$

Sienos mazgo DSs 37,5/12 apšiltinto DM 15/9 Dr varžos skaičiavimas



- Durisol DSs 37.5/12 varžos skaičiavimas:

$$R_{A-A} = \frac{d_{pol}}{\lambda_{pol}} + \frac{d_{durisol}}{\lambda_{durisol}} + \frac{d_{concrete}}{\lambda_{concrete}} = \frac{0.175}{0.032} + \frac{0.08}{0.1175} + \frac{0.12}{2} = 6.210 \text{ m}^2\text{K/W};$$

$$R_{B-B} = \frac{d_{durisol}}{\lambda_{durisol}} = \frac{0.375}{0.1175} = 3.191 \text{ m}^2\text{K/W};$$

$$R_{C-C} = \frac{d_{durisol}}{\lambda_{durisol}} + \frac{d_{concrete}}{\lambda_{concrete}} = \frac{0.275}{0.1175} + \frac{0.1}{2} = 2.39 \text{ m}^2\text{K/W};$$

Durisol DSs 37.5/12 varžos vidurkis:

$$R_{37.5/12} = 6.210 \cdot 0.7 + 3.191 \cdot 0.19 + 2.39 \cdot 0.11 = 5.216 \text{ m}^2\text{K/W};$$

- DM 15/9 – Dr varžos skaičiavimas:

$$R_{A-A} = \frac{d_{pol}}{\lambda_{pol}} + \frac{d_{durisol}}{\lambda_{durisol}} = \frac{0.09}{0.032} + \frac{0.06}{0.1175} = 3.323 \text{ m}^2\text{K/W};$$

$$R_{B-B} = \frac{d_{durisol}}{\lambda_{durisol}} = \frac{0.15}{0.1175} = 1.277 \text{ m}^2\text{K/W};$$

Durisol DM 15/9 varžos vidurkis:

$$R_{15/9} = 3.323 \cdot 0.8 + 1.277 \cdot 0.2 = 2.658 + 0.255 = 2.913 \text{ m}^2\text{K/W};$$

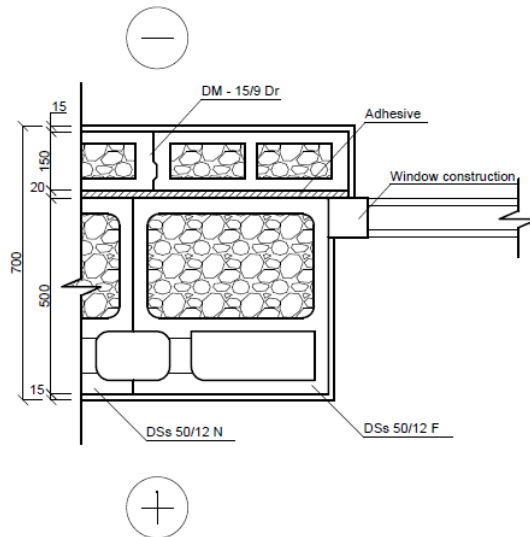
- Visos sienos varžos skaičiavimas:

$$R_b = R_{37.5/12} + R_{15/9} + R_{si} + R_{se} + 3 \cdot R_{tinko} = 5.216 + 2.913 + 0.13 + 0.04 + 3 \cdot 0.15 = 8.749 \text{ m}^2\text{K/W};$$

Šilumos perdavimo koeficientas:

$$U = \frac{1}{R_b} = \frac{1}{8.749} = 0.114 \text{ W/m}^2\text{K};$$

Sienos mazgo DSs 50/12 apšiltinto DM 15/9 Dr varžos skaičiavimas



- Durisol DSs 50/12.5 varžos skaičiavimas:

$$R_{A-A} = \frac{d_{pol}}{\lambda_{pol}} + \frac{d_{durisol}}{\lambda_{durisol}} + \frac{d_{concrete}}{\lambda_{concrete}} = \frac{0.265}{0.032} + \frac{0.11}{0.1175} + \frac{0.125}{2} = 9.280 \text{ m}^2\text{K/W};$$

$$R_{B-B} = \frac{d_{durisol}}{\lambda_{durisol}} = \frac{0.5}{0.1175} = 4.255 \text{ m}^2\text{K/W};$$

$$R_{C-C} = \frac{d_{durisol}}{\lambda_{durisol}} + \frac{d_{concrete}}{\lambda_{concrete}} = \frac{0.4}{0.1175} + \frac{0.1}{2} = 3.454 \text{ m}^2\text{K/W};$$

Durisol DSs 50/12.5 varžos vidurkis:

$$R_{50/12.5} = 9.280 \cdot 0.7 + 4.255 \cdot 0.15 + 3.454 \cdot 0.15 = 7.652 \text{ m}^2\text{K/W};$$

- DM 15/9 – Dr varžos skaičiavimas:

$$R_{A-A} = \frac{d_{pol}}{\lambda_{pol}} + \frac{d_{durisol}}{\lambda_{durisol}} = \frac{0.09}{0.032} + \frac{0.06}{0.1175} = 3.323 \text{ m}^2\text{K/W};$$

$$R_{B-B} = \frac{d_{durisol}}{\lambda_{durisol}} = \frac{0.15}{0.1175} = 1.277 \text{ m}^2\text{K/W};$$

Durisol DM 15/9 varžos vidurkis:

$$R_{15/9} = 3.323 \cdot 0.8 + 1.277 \cdot 0.2 = 2.658 + 0.255 = 2.913 \text{ m}^2\text{K/W};$$

- Visos sienos varžos skaičiavimas:

$$R_b = R_{50/12.5} + R_{15/9} + R_{si} + R_{se} + 3 \cdot R_{tinko} = 7.652 + 2.913 + 0.13 + 0.04 + 3 \cdot 0.15 = 11.185 \text{ m}^2\text{K/W};$$

Šilumos perdavimo koeficientas:

$$U = \frac{1}{R_b} = \frac{1}{11.185} = 0.089 \text{ W/m}^2\text{K};$$