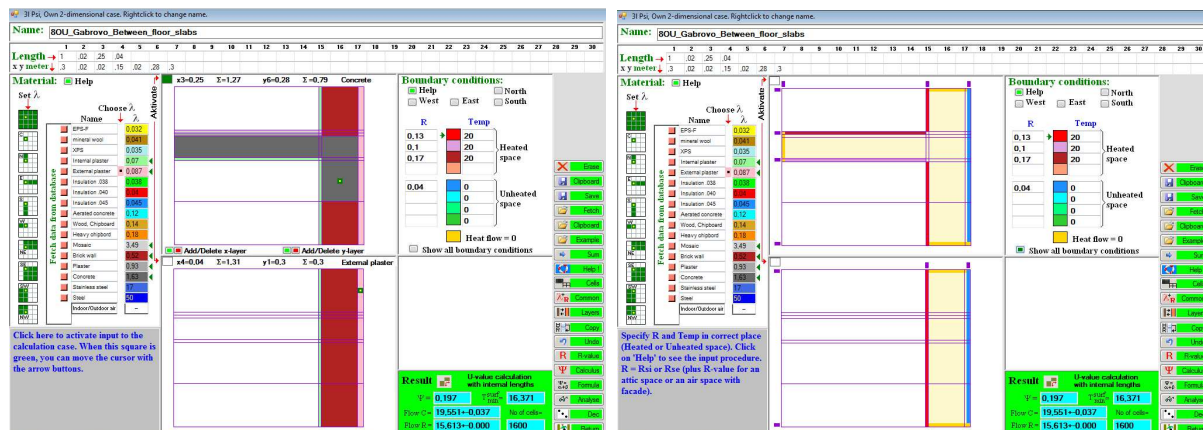
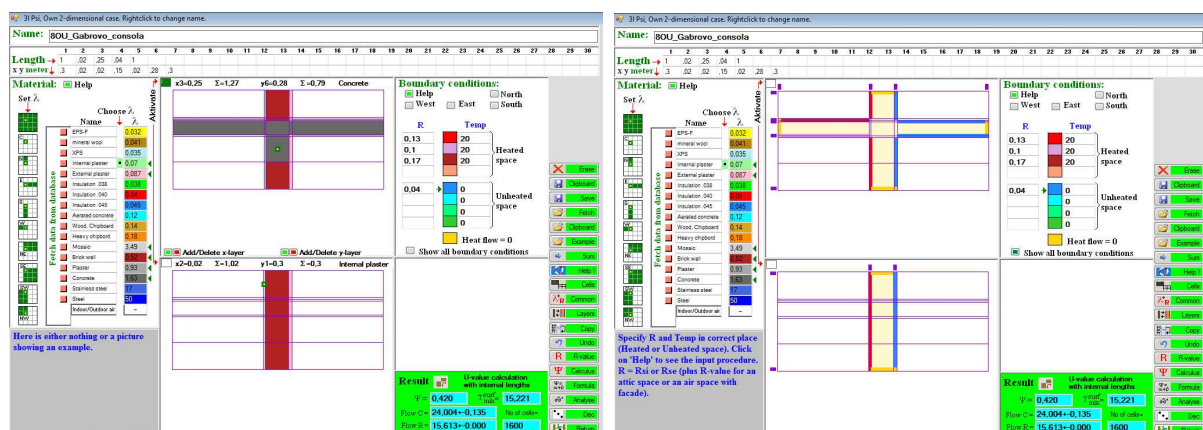


Приложение 3. Изчисление на коефициентите на топлопреминаване на линейни термомостове - екрани от софтуер uform версия 2012 - 2

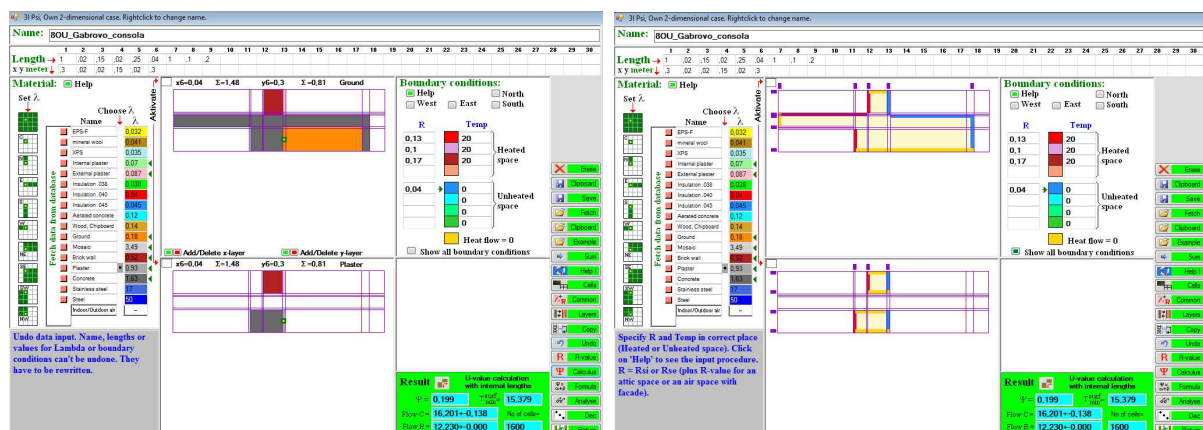
1. Междуетажна плоча:



2. Конзола



3. Стълбище с насп



4. Неотопляем входно антре

The figure consists of two side-by-side screenshots of the Gabrovo software interface.

Left Screenshot: Boundary conditions

- Title Bar:** 3D Plg, Own 2-dimensional case, RightClick to change name.
- Name:** [SOU_Gabrovo_entrance_unheated]
- Length:** 1 1.02 25.04
- Y meters:** 1 3.02 15.20 20.3
- Material:** [Help]
- Choose λ :**
 - EPS-i: 0.032
 - mineral wool: 0.035
 - EPS: 0.035
 - Internal plaster: 0.07
 - External plaster: 0.087
 - Insulation D03: 0.086
 - Insulation D40: 0.086
 - Insulation D40: 0.086
 - Asphalt concrete: 0.12
 - Wood, Chipboard: 0.14
 - Heavy chipboard: 0.18
 - Brick wall: 0.43
 - Masonry: 3.43
 - Brick wall: 0.43
 - Plaster: 0.032
 - Concrete: 0.13
 - Steel: 0.032
 - Indoor/Outdoor air: -
- Boundary conditions:**
 - Help** ☒ ☐ West ☐ East ☐ North ☐ South
 - R** **Temp**
 - 0.13 ☒ 20 Heated space
 - 0.1 ☒ 20 Heated space
 - 0.17 ☒ 20 Heated space
 - 0.04 ☐ 0 Unheated space
 - 0.13 ☐ 5 Unheated space
 - 0.1 ☐ 5 Unheated space
 - ☒ Heat flow = 0
 - ☒ Show all boundary conditions
- Result:**
 - U-value calculation: 0.322
 - U-value: 15.863
 - Flow: 20.050-0.117
 - Flow: 12.605-0.000
 - 1600

Right Screenshot: Result

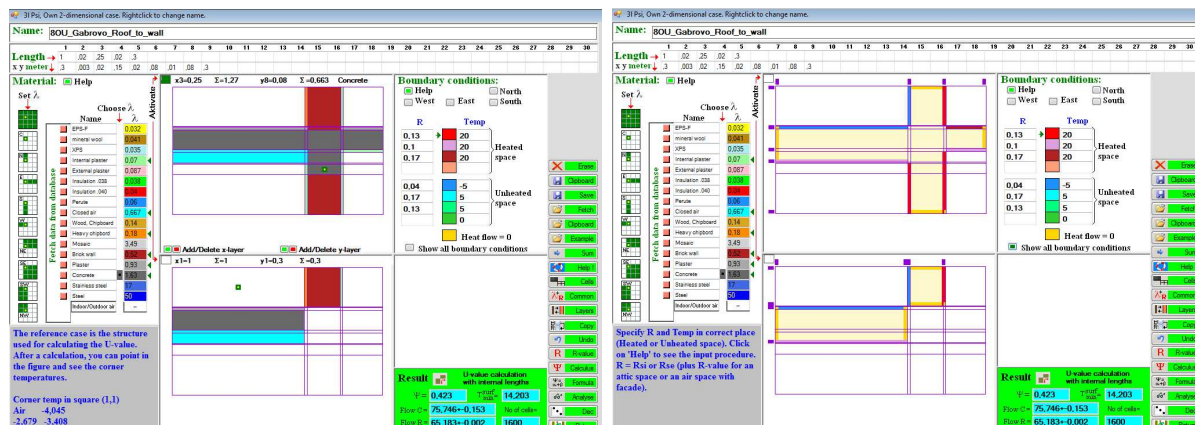
- Title Bar:** 3D Plg, Own 2-dimensional case, RightClick to change name.
- Name:** [SOU_Gabrovo_entrance_unheated]
- Length:** 1 1.02 25.04
- Y meters:** 1 3.02 15.20 20.3
- Material:** [Help]
- Choose λ :** (Same list as left screenshot)
- Boundary conditions:** (Same as left screenshot)
- Result:**
 - U-value calculation: 0.322
 - U-value: 15.863
 - Flow: 20.050-0.117
 - Flow: 12.605-0.000
 - 1600

[illegible]

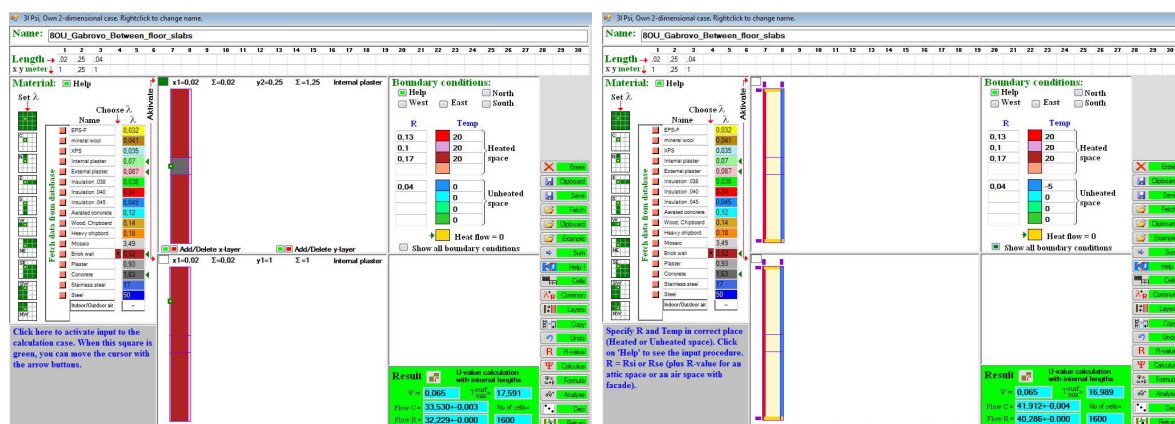
Figure 10 displays two screenshots of the 2D HomeLab software interface. The left screenshot shows the 'Material' selection screen for a 2D case, with a 30x30 grid and various material properties like thermal conductivity (k) and density (rho). The right screenshot shows the 'Boundary conditions' screen for a 2D case, with a 30x30 grid and various boundary conditions like temperature (T) and heat flux (q).

Приложение 3. Изчисление на коефициентите на топлопреминаване на линейни термомостове - екрани от софтуер uform версия 2012 - 2

8. Връзка между плосък покрив и стени



9. Колони



A tool for thermal bridge conversion to exterior dimensions						
Description		Units	СЪЛБИ	Вход	Покрив	Покрив κД
Adjacent Area I	ψ Interior Dimensions	W/(mK)	0,199	0,372	0,308	0,214
	Temperature Diff. TB	K	20,000	20,000	20,000	20,000
	Temperature Diff. Δϑ I	K	20,000	20,000	20,000	20,000
	Exterior - Interior Dim. I	m	0,210	0,210	0,190	0,283
Adjacent Area II	U-Value building assembly I	W/(m²K)	2,053	1,379	1,379	1,379
	Temperature Diff. Δϑ II	K	20,000	0,000	20,000	20,000
	Exterior - Interior Dim. II	m	0,000	0,000	0,310	0,310
	U-Value building assembly II	W/(m²K)	0,500	0,500	0,793	1,933
ψ Exterior Dimensions		W/(mK)	-0,232	0,082	-0,200	-0,775