

Dynamic Online Thermal Bridge Atlas

Building Physics Platform
Building Construction Design Ltd.

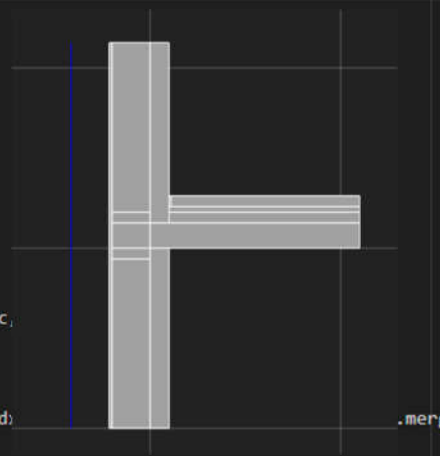
The era of paper-based design manuals and even static online content is over. Use our online software-as-service platform aimed especially at building material manufacturers, system administrators, trade organizations and larger engineering firms to provide building physics calculations as design support for employees, clients and designers

The Building Physics Platform is not just another thermal bridge simulation software but a completely web-based system that offers much more than running individual calculations. Create an online extendable construction catalogue with a flexible parameterization system that allows you to set up the generation of a potentially unlimited number of subvariants. After entering a base model and selecting the desired calculation types, the system is able to deliver on-demand calculations for end users with just a few clicks via a simple public interface. Using the predefined parameters the end user has a much better chance to customize the base detail to accurately match his/her specific case than with any other solution. Maintaining and updating a catalogue through our editor interface is just as easy as updating a website.

We also offer customized end user interfaces and the implementation of spatialized or local calculation standards.

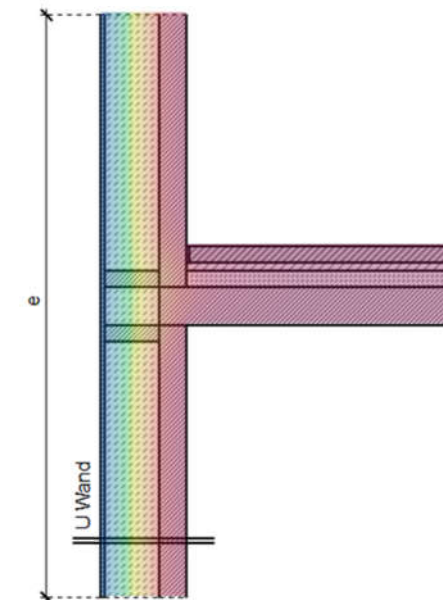
- The owner has an online editor to expand, parametrize or modify an arbitrary size collection of construction details
- Ability to Parametrize optional layers or elements, element size, element or layer thermal conductivity selection of specific building products
- Constructions are defined with geometry generation scripts that ensure correct geometry for all possible parameter combinations.
- Real-time update of the construction drawing based on the parameter values selected
- Linear thermal transmittance
- Simulations performed in the background on our server
- Published constructions can be viewed, individualized calculated with just a few simple clicks in the freely available end user interface
- Embed into existing websites
- API endpoint for other services
- Documentation and training and / or input (modeling) services to kickstart your new catalogue

```
1 let acu_t = parameters.acu_t;
2 let filling_t = parameters.filling_t;
3 let ins_t = parameters.ins_t;
4 let rib_sep = parameters.rib_sep;
5 let rib_w = parameters.rib_w;
6 let screed_t = parameters.screed_t;
7 let sheeting_t = parameters.sheeting_t;
8 let slab_t = parameters.slab_t;
9 let wall_t = parameters.wall_t;
10
11
12 //wall bottom
13 let bc={right:'i_wall',bottom:'a'};
14 let wall_bottom=g.rect({dx:wall_t,dy:1.0,bc:bc,
15
16 //slab
17 bc={bottom:'i_ceil',right:'a'};
18 let slab=wall_bottom.vertices('>x;<y').rect({d
19
20 //wall top
21 bc={top:'a',right:'i_wall'};
22 let wall_top=slab.vertices('>x;<y').rect({dx:wall_t,dy:1,bc:bc,mat:'w'}).merge();
23
24 //filling
25 bc={right:'a'};
26 let filling=wall_top.vertices('>y;<x').rect({dx:1,dy:filling_t,bc:bc,mat:'fill'}).merge
27
28 //acoustic layer
29 bc={right:'a'};
30 let acu=filling.vertices('>x;<y').rect({dx:1,dy:acu_t,bc:bc,mat:'acu'}).merge();
31
32 //perinsul
33 let perinsul=acu.vertices('>x;<y').rect({dx:1,dy:perinsul_t,bc:bc,mat:'perinsul'}).merge();
```



- Model:	
ID:	1
Name:	Demo
Description:	Dies ist nur eine Demo. Mögliche Anzahl der Parameterkombinationen: 6160000
- Parameters:	
Insulation - Thickness [m]:	0.2
Impact Sound Insulation - Thickness [m]:	0.03
Wall - Thickness [m]:	0.1
Slab - Thickness [m]:	0.14
Ribs - Width [m]:	0.06
Ribs - Separated?:	<input checked="" type="checkbox"/>
Sheeting - Thickness [m]:	0.015
Filling - Thickness [m]:	0.06
Screed - Thickness [m]:	0.06
- Psi Wert:	
Solve!	
L2D [W/mK]:	0.348
Psi e [W/mK]:	0.031

Check out an online demo: wall – to – slab connection detail in an LVL construction with over 6 million possible parameter combinations



<https://www.buildingconstructiondesign.hu/en/services/softwaredevelopment/>