

# Heat insulation



Reference-object Bern Brünnen / Switzerland  
All 3 slides are executed with an insulation.

With the increase in energy-related requirements, heat insulation for all closed-in external waterslides is becoming more and more important. The insulation developed by us has proven itself in practice and is becoming increasingly popular.



On the basis of miscellaneous measurements at reference-objects, we can give following saving-possibilities known:

| cacluation on the basis of a tube slide              |                     |                   |               |  |
|--|---------------------|-------------------|---------------|--|
| Basic conditions:                                    |                     |                   |               |  |
| length of slide:                                     | 100                 | m                 |               |  |
| water volume:  | 120                 | m <sup>3</sup> /h |               |  |
| inside-temperature slide:                            | 27                  | °C                |               |  |
| diameter of the slide:                               | 120                 | cm                |               |  |
| daily business-time:                                 | 12                  | hours             |               |  |
|  |                     |                   |               |  |
|  | <b>Energy needs</b> |                   | <b>Saving</b> | <b>Energy needs per meter of slide</b> |
| Heat-loss without cover and insulation (one-stale-y) | 240'333             | kWh               |               | 2'403,3 kWh/m                          |
| Heat-loss with air-filling through a cover           | 80'733              | kWh               | 66%           | 807,3 kWh/m                            |
| Heat-loss with heat insulation and cover             | 8'085               | kWh               | 97%           | <b>80,9 kWh/m</b>                      |

As a result, heat transfer coefficients can be ameliorated from normally approx. 11,0 W/m<sup>2</sup>K to approx. 0,35 W/m<sup>2</sup>K.

