

**Comparison of basic methods of installing new horizontal insulation in existing buildings.**

	<b>PRINZ draining of walls through sawing process</b>	<b>Chemical methods – injection</b>	<b>Method of driving stainless chrome-nickel steel sheets</b>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>100% efficiency – comparable insulation as in a new building</li> <li>durability of PEHD horizontal insulation – until the end of a building's technical durability</li> <li>insulation execution possible in case of all wall loads</li> <li>extensive experience in method application (for about 100 years)</li> </ul>	<ul style="list-style-type: none"> <li>short time of order completion</li> <li>relatively low interference in the static stability of the construction as compared to mechanical methods</li> <li>insulation execution possible in case of all wall loads</li> </ul>	<ul style="list-style-type: none"> <li>high efficiency</li> <li>insulation execution possible in case of all wall loads</li> <li>experience in method application (for about 20 years)</li> <li>high durability of horizontal insulation estimated to total at least 50 years</li> </ul>
<b>Disadvantages</b>	<ul style="list-style-type: none"> <li>linked with more extensive repair work – more working space required</li> <li>substantial price increase in the case of an irregular course of working joints in walls made from harder materials</li> </ul>	<ul style="list-style-type: none"> <li>no possibility of optical control of the behaviour of substance once it is introduced</li> <li>high variety of available agents for injections, characterised by different levels of efficiency</li> <li>efficiency of the method depends on many factors</li> </ul>	<ul style="list-style-type: none"> <li>considerable financial outlays, mainly due to high prices of metal sheets</li> <li>in case of long walls without staying, the application of the method is risky</li> <li>existence of a continuous joint is required</li> <li>considerable vibrations connected with driving metal sheets, which may cause the formation of cracks</li> <li>no possibility of execution if stones are present in a joint</li> </ul>
<b>Warranty period</b>	30 years of warranty for services provided (in practice, until the end of a building's technical durability)	approximately 5 years, the procedure needs to be repeated after this time	20 years
<b>Time of execution</b>  (house 10x10 m, walls 40 cm + partition walls, approx. 22m <sup>2</sup> wall surface in total)	approx. 3-4 working days	approx. 2-3 working days	approx. 3-4 working days
<b>Application</b>	<ul style="list-style-type: none"> <li>in case of brick walls, carbide tipped chains are used</li> <li>in case of stones and concrete, saws with a diamond rope are used</li> <li>dampness level is of no significance</li> <li>historic buildings, palaces, castles</li> </ul>	<ul style="list-style-type: none"> <li>many injection techniques used depending on the type of moisture, degree of dampness or injection agents applied</li> <li>historic buildings, palaces, castles</li> </ul>	<ul style="list-style-type: none"> <li>buildings with brick walls, with continuous and equal joint</li> <li>homogeneous brick walls</li> <li>historic buildings – walls of maximum thickness of about 1 m</li> </ul>