

Straw – an ecological and cheap insulation material to renovate buildings

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Abridged Version

Small bales of straw can be produced by farmers without any problems and additional working processes and this material meets all the standards for insulating buildings regarding the harvesting, the manipulation and the storing. No essential changes in the conventional production are necessary and no additional investments have to be made. The limits regarding the moisture of the straw and the corns (< 15%), the density (80 kg/m³ to 130 kg/m³), impurities with weed (< 0,5 vol %) and the remaining corns (< 0,4 vol %) can be met without any additional working processes. The necessary density can be achieved by adjusting the press accordingly.

- The Austrian Institute for Construction Technology is authorised to carry out the the testing and checking of small bale of straws and this institute has published the first results.
- These results which have been achieved in the course of the European authorization process and the calculations regarding the forming of mould carried out by the Institute for Ecological Construction show us that the authorization of straw as an insulation material can be achieved without adding additional substances both in Europe and in Austria.
- Bales of straw can be applied as an innovative renewable insulation material in Central Europe. Furthermore, due to the quick and simple production process it can also contribute essentially to reducing CO₂.

Further information and details about the project:

Stroh Kompakt, Fabrik der Zukunft, einer Initiative im Rahmen der Programmlinie „Energiesysteme der Zukunft“ des Bundesministeriums für Verkehr, Innovation und Technologie (BMVIT)

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