



Passivhaus Institut
Dr. Wolfgang Feist
Rheinstr. 44/46
D-64283 Darmstadt

Certificate

The Passive House Institute awards the building
Tesco Store Tramore F30 NS, Tramore, County Waterford, Ireland

Principal: **Tesco Ireland Ltd.**
Gresham House, Marine Road, DUN LAOGHAIRE
County Dublin, Ireland

Architect: **Joseph Doyle Architects**
3M House, Adelphi Centre, Upper George's Street
Dun Laoghaire, County Dublin, Ireland

Mechanical **White Young Green Consultig Ltd.**
Services: 1 Lockseley Buisness Park, Montgomery Road
Belfast BT6 9UP, Ireland

the certificate

Quality Approved Passive House

The planning of this building meets the criteria for Passive Houses set up by the
Passive House Institute.

With appropriate execution it will conform to the following standards:

- The building features excellent heat insulation all around and first grade component joint details in regard to building physics. Estival sun protection has been considered. Heat requirement is limited to
15 kWh per m² treated floor area and year
- The building shell features excellent air tightness proven according to ISO 9972 which guarantees to be free of draught as well as little energy consumption. Air change rate of the building shell at 50 pascal pressure differential is limited to
0,6 ach, in reference to the building's volume
- The building features a controlled ventilation system with high class filters, highly efficient heat recovery and low electric power consumption. Thus, excellent air quality together with low energy consumption are achieved.
- The demand in primary energy for heating, warm water, ventilation and electricity totals with standard use less than
... kWh per m² treated floor area and year

This certificate is to be used together with the certification documents only. From these the precise data of the building can be obtained.

Passive Houses offer high comfort in summer as well as in winter conditions and can be heated with little effort, e.g. by heating of supply air. The building shell of a Passive House is evenly warm on the inside, inside surface temperatures are hardly different from room air temperatures. By means of the high grade air tightness drought appearance is impossible in normal use. The ventilation system steadily provides good air quality. Heating costs in a Passive House are very low. Due to little energy consumption Passive Houses offer a high rate security against future rise in energy prices and energy scarceness. Moreover the environment is ideally protected as energy ressources are spent very economically and only small amounts of carbondioxide (CO₂) and other concentrations are emitted.

issued:
Darmstadt, October 02. 2008

Dr. Wolfgang Feist