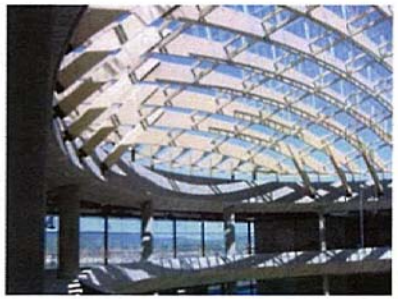
neohome SYSTEM

We do these:








Why not your house!

EXCLUSIVE BUILDINGS

HIGH END HOUSING

FAST EXECUTION

INDUSTRIALIZED CONSTRUCTION

Environmental sustainability

CONFORT

CE

ISO 9001
BUREAU VERITAS
Certification

QUALITY

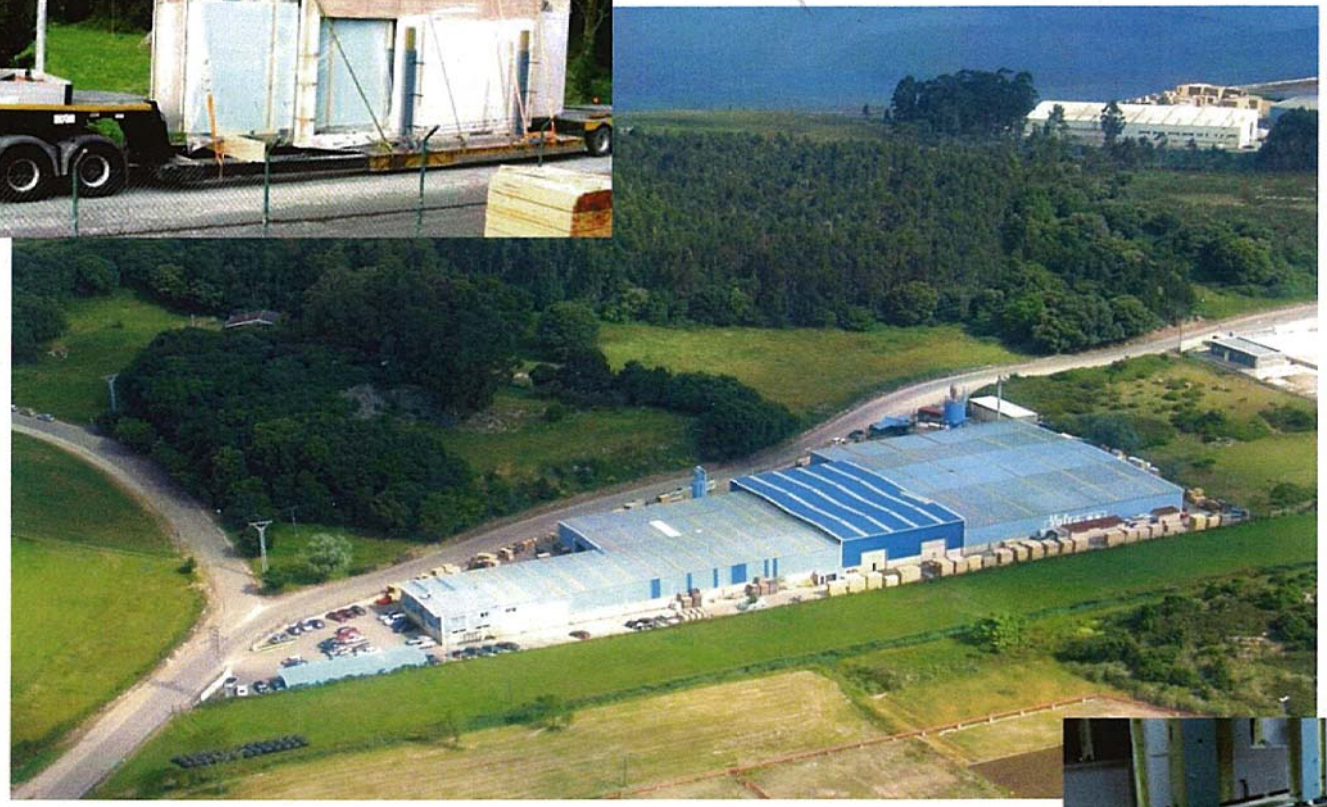
NO ENERGY LOSS

NO DREBIS

NO LONG

EXECUTION PERIOD

NO SMOKES



Its built:
At our factory

Vision

Neohome is a vision of buildings that create healthier and more comfortable lives for their occupants reducing the impact negatively on the climate – moving us towards a cleaner, healthier and safer world.

Neohome proposes a target framework for how to design buildings that:

- Contribute positively to human health and wellbeing by focusing on the indoor and outdoor environment and the use of renewable energy.
- Reduce the use of energy; Neohome enclosures elements, are designed to have high heat transmission resistance, reducing the necessity of energy.
- Building is designed following clients requirements (each house is different) with high quality finished materials (bricks façade or natural stone facing)
- Fast execution period.

Neohome is evaluated on the basis of the interaction between energy consumption, indoor climate conditions and impact on the external environment.

Neohome building system

Neohome construction system is an industrial process line to final assembly. It guarantees and increases quality and reduces labor risks. It enables time and manufacturing systems to be controlled without depending on weather conditions.
We have designed a dry construction system with no need for water during the site construction phase.
Due to Neohome construction system, joints between walls are an accurate, safe, hardy and fast method.

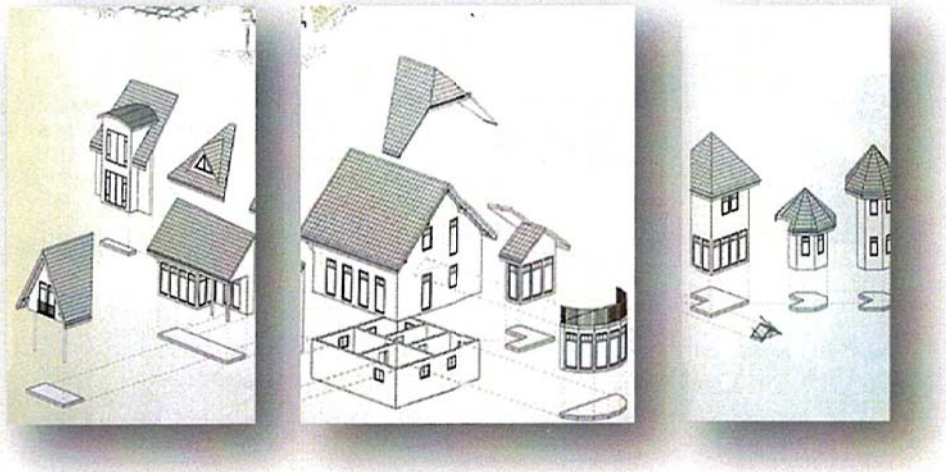
The greatest contribution of Neohome system is its environmental sustainability.
95% of the materials used are recyclable.
CO_2 emissions are reduced.
During manufacturing, around 80% of energy consumption is saved.
During the construction site phase, environmental aggression is low because facilities such as cranes, stockpiles or silos are not required.

Properties

The manufacturing process and treatment of components are based on the Spanish Technical Building Code (TBC) and Eurocode 5 regulations.

The most important characteristics of the system are:

- Stability
- Homogeneity
- 60% saving on delivery time



- Excellent fire resistance
- Reduced assembly time
- Use of sustainable materials
- Excellent behavior of Building Materials in aggressive environments
- Antimagnetic quality and electrical insulation
- Acoustic comfort
- High heat transmission resistance
- A range of façade designs
- Durability

Thermal and acoustic properties

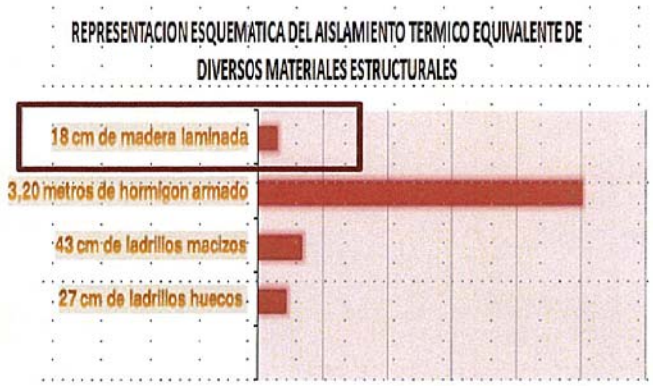
As can be seen at the schematics, Neohome enclosures provide excellent thermal and acoustic insulation, and manage to reduce HVAC energy costs.

System Objectives:

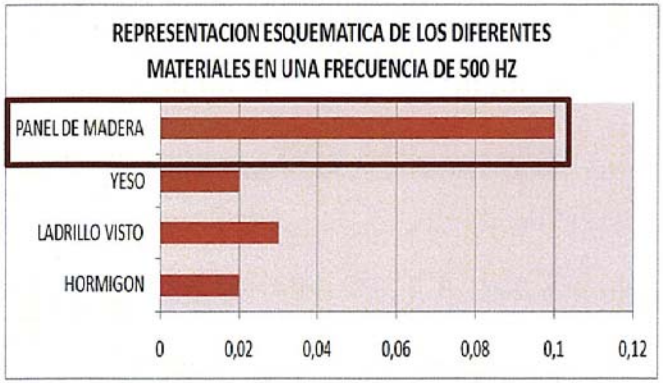
- To minimize energy loss due to heat transfer.
- To protect the environment
- To improve comfort
- To save 65% on energy by reducing the need for air conditioning
- The core of the product has great acoustic absorption.

The façade has a density of about 145 kg/m2 (denominated "light facade" in TBC), composed of traditional materials and laminated wood panels. Laminated wood panels increase the acoustic performance of the wall.

- The façade is designed according to TBC DB-HR requirements (Noise protection regulations).



Thermal insulation of different materials with different thickness



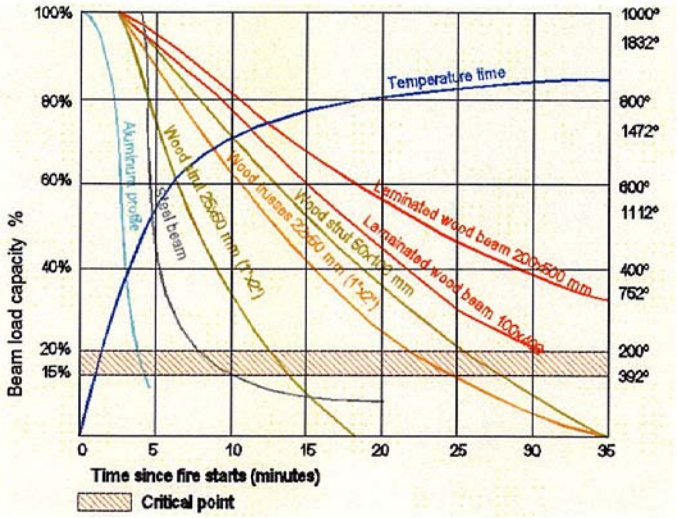
Schematic representation of equivalent acoustic absorption

Fire protection

The façade is a poor heat conductor, providing not only excellent thermal insulation but also good fire resistance – better than iron or concrete.

One property of the protection against fires of these enclosures is carbonation. In the event of fire, the surface in contact with flames is carbonized and becomes a worse heat conductor. The combustion propagation is 0.7 milliliters per minute.

It would take 4 ½ hours of fire for the walls supporting the building to collapse, compared with 30 minutes required by the regulations.



Schematic representation of the fire resistance of the different materials

Energy rating and energy consumption

All Neohome buildings achieve energy class "A" rating

Traditional buildings emit **137.6** % more CO2 than Neohome.

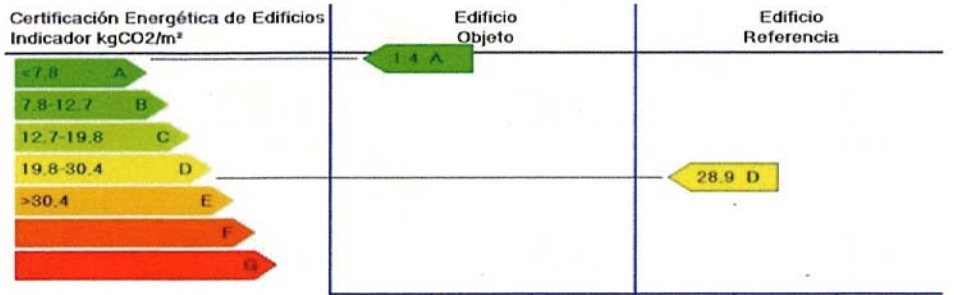
For total energy consumption, the traditional system consumes **65.9** % more than Neohome, regardless of fuel and boiler type.

For heating and DHW, consumption rises to **137.6** % in traditional systems, compared to Neohome buildings

If **10**% of family homes were built with our building system, the Kyoto commitment would be met.

Calificación Energética	Proyecto	
	PROTOTIPO VIVIENDA UNIFAMILIAR ELECHAS	
	Localidad: ELECHAS	Comunidad: CANTABRIA

8. Resultados



	Edificio Objeto			Edificio Referencia		
	Clase	kWh/m²	kWh/año	Clase	kWh/m²	kWh/año
Demanda calefacción	C	41,7	9333,8	E	75,2	16832,2
Demanda refrigeración	-	-	-	-	-	-
	Clase	kgCO2/m²	kgCO2/año	Clase	kgCO2/m²	kgCO2/año
Emisiones CO2 calefacción	A	0,0	0,0	E	24,1	5394,3
Emisiones CO2 refrigeración	-	-	-	-	-	-
Emisiones CO2 ACS	A	0,0	0,0	D	4,8	1074,4
Emisiones CO2 totales			313,4			6468,7

Datos para la etiqueta de eficiencia energética

	Edificio Objeto		Edificio Referencia	
	por metro cuadrado	anual	por metro cuadrado	anual
Consumo energía final (kWh)	74,2	16618,1	123,1	27545,4
Consumo energía primaria (kWh)	77,7	17385,7	128,9	28850,1
Emisiones CO2 (kgCO2)	1,4	313,4	28,9	6468,7

Construction process

Día 0

Día3

Día 15

Día 25

neohome
SYSTEM

High quality, fast execution and save energy

FACTORY, TECHNICAL AND COMMERCIAL DEPARMENT

Carretera Elechas s/n, 39792, Gajano (Cantabria)

Phone Number: 942 502 273-942 502 880 Fax: 942 503 064

Email: neohome@yofra.es

www.neohome.es

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SYSTEM