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Perspective and chances for timber frame in the UK

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Perspective and chances for timber frame in the UK

History of timber frame in the UK

- Timber frame construction in the UK dates back to medieval times
- Up to the 15th century it was the most used building material
- Timber frame construction had a market share of ca. 25% in the 1980's
- BUT timber frame construction was all but killed in 1983 due to a very damning report
 in a 'World in Action' TV programme. However, the problem was not timber frame as a
 construction method but bad site practise on some sites



Early stud frame buildings from 1780's. Picture: TRADA.



Probably the oldest standing timber building in the UK, dating from around 1000 AD, The Church of St. Andrew, Essex. Picture: Appraisal and Repair of Timber Structures

Housing starts in the UK by country (1000 units)

				Great	Northern
Year	England	Wales	Scotland	Britain	Ireland
1988	219.9	13.0	19.6	252.6	9.8
1989	166.4	12.1	22.6	201.1	8.2
1990	133.5	10.3	20.4	164.2	7.5
1991	133.8	9.4	20.2	163.4	7.4
1992	129.3	8.9	18.5	156.7	7.7
1993	151.2	10.6	22.6	184.4	8.7
1994	165.4	10.7	24.9	201.2	9.7
1995	136.2	9.2	22.6	168.4	9.8
1996	144.7	8.9	21.6	174.9	10.1
1997	157.0	9.1	23.0	188.8	11.0
1998	148.7	8.5	19.6	176.8	10.5
1999	146.1	9.3	22.8	178.3	10.8
2000	143.9	9.4	23.9	177.7	11.2
2001	146.5			178.9	

Source: NHBC New House-Building Statistics

Timber frame - Market share of new homes started (NHBC registered builders)

				Great	Northern
Period	England	Wales	Scotland	Britain	Ireland
1993	3%	5%	44%	6%	3%
1994	2%	5%	42%	6%	2%
1995	3%	4%	40%	7%	1%
1996	2%	4%	43%	7%	2%
1997	2%	3%	41%	6%	1%
1998	2%	3%	43%	7%	1%
1999	3%	6%	43%	8%	2%
2000	5%	6%	50%	10%	2%
2001	6%	8%	46%	10%	2%
2002 Q1	4%	7%	50%	10%	6%
2002 Q2	6%	4%	55%	13%	2%

Source: NHBC New House-Building Statistics

What is built in timber frame?

In 2000/2001 domestic construction up to two storeys accounted for 69% and over two storeys 24% of volume

- commercial building was 7% of volume
 - schools
 - sports halls
 - hotels
 - healthcare facilities



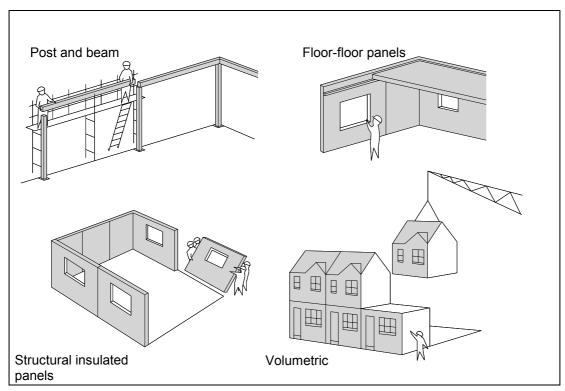






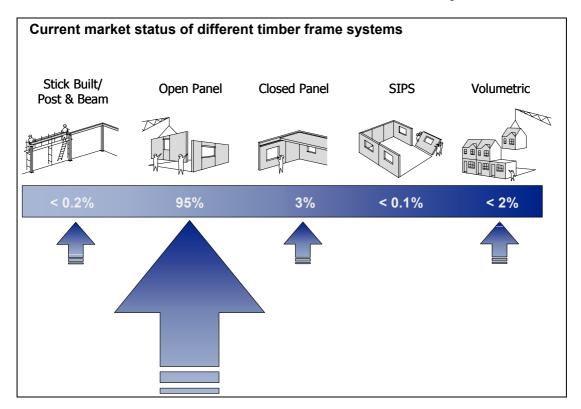
Pictures: TRADA

Different timber frame systems



Pictures: TRADA

Current market status of different timber frame systems



Timber frame construction in the future

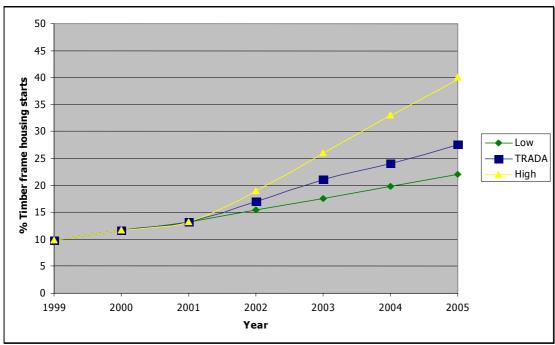


Housing requirement forecasts

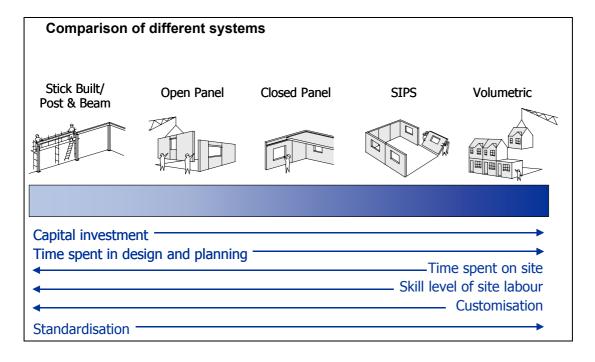
Recent projections:5 million

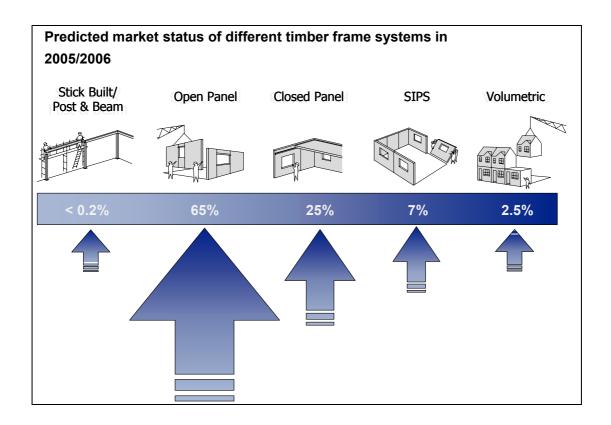
- 3.8 million
- 4 million to 2020
- 4.4 Million Households Required by 2016

Timber frame market share forecast, %



Source: TRADA





Future challenges for timber frame

New Building Regulations – Part L (England and Wales) and J (Scotland)

- U values
- Carbon index
- Air tightness

New Building Regulation – Part E

Acoustic

UK Government's commitment to Sustainable Development

- Economy
- Communities
- Environment

Resource efficiency

The Egan Report on Construction;

- Capital costs reduce by 10%
- Construction time reduce by 10%
- Predictability increase by 20%
- Defects reduce by 20%
- Accidents reduce by 20%
- Productivity increase by 10%
- Turnover and profits increase by 10%

Conclusion

Modern timber frame constructions meet latest Building Regulations Part L & J and Part E in terms of thermal and acoustic insulation

UK Government's commitment for Sustainable Development The Egan report on construction industry

FUTURE IS BRIGHT - FUTURE IS TIMBER FRAME





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