

House Exterior



Objectives

- Learn all of the components of the house exterior.
- Learn the different types of exteriors available for a consumer.

House exterior

- House frame
- Insulation
- Windows
- Siding
- Roof

House Exterior

- Framing
 - Wood framing
 - Steel framing
- Prefabricated
 - Pre-cut
 - Manufactured
 - Modular
 - Panelized

House framing

- Wood
 - Dimensioned lumber
 - Engineered products



House framing

- Steel
 - Better than wood
 - Resistant to termites
 - Stronger
 - More expensive
 - Requires specialty tools



Prefabricated

- All or sections of house made in factory
- Better quality control
- Built quicker
- More difficult to install systems

Prefabricated

- Pre-cut
 - Factory cut and assembled on site
- Manufactured
 - Built in factory & sections transported to site and attached

Prefabricated

- Modular
 - Built in factory and transported to site and placed on foundation
- Panelized
 - Uses wall & roof panels made in factory and assembled on foundation

Insulation

- Any material that reduces heat transfer from one area to another
- Most are flammable
 - Avoid
 - Light fixtures
 - Ceiling or ventilation fans
 - Gas flues or chimneys



Insulation

- Types
 - Batt or blanket
 - Loose fill
 - Rigid
 - Spray type foam



Insulation

- Batt or Blanket
 - Fits in between studs
 - Paper or aluminum foil face for vapor barrier



Insulation

- Loose fill
 - Loose material and poured or blown in ceilings and walls
 - Will settle after time

Insulation

- Rigid
 - Looks like a board
 - Could have vapor retarder already on it
 - Used in roofs and foundation



Spray type foam

- Rigid
 - Applied between stud spaces
 - Usually applied by professional
 - 20% more expensive
 - Release toxic gases when burned

Siding

- Brick
- Finished wood & wood composites
- Cedar & durable woods
- Metal
- Vinyl
- Fiber cement
- Stucco
- External insulation & finish systems (EIFS)

Siding

- Brick veneer
 - Initial high cost
 - Very durable
 - High sell value
 - Heat capacity
 - Finding matching brick



Siding

- Wood clapboard
 - Easy to install
 - Durable
 - High cost
 - Periodic maintenance



Siding

- Wood composite siding
 - Less expensive
 - Not as durable
 - More popular

Siding

- Durable wood siding
 - Popular weathered look
 - Could have uneven appearance



Siding

- Metal siding
 - Low initial cost
 - Long life and durability
 - Fire & hail resistant
 - Periodically repainted
 - Corrodes



Picture from Frame Builders News Aug 2007

Siding

- Vinyl siding
 - Easy installation
 - Low initial cost
 - Many shapes, textures & colors



Siding

- Vinyl siding
 - No painting needed
 - Low durability
 - High thermal expansion



Siding

- Fiber cement siding
 - Becoming more popular
 - Looks like wood grain
 - Lower cost
 - Durability
 - paintability

Siding

- Exterior insulation & finish systems
 - Reinforced plastered or painted coating over rigid insulation
 - Can be preassembled or custom built
 - Variety of textures and colors
 - High R value

Siding

- Exterior insulation & finish systems
 - Condensation may occur inside of it
 - Expensive to fit
 - No standard on EIFS
 - Experience contractors should only be used

Roofs

- Steep
- Low slope



Roofs

- Steep
 - Greater than 1.5" per foot
 - Used in humid regions of US
 - Roofing choices vary with region
 - Durability dependent on environment



Roofs

- Types
 - Asphalt
 - Clay tiles
 - Concrete tiles
 - Slate
 - Fiber cement
 - Metal





Pictures from Metal Home Digest Nov/Dec 2007
