

A decorative graphic on the left side of the slide featuring a stylized branch with several leaves in various shades of blue, set against a dark blue background.

Exterior Building Materials

City Council/Planning and Zoning
Commission Joint Meeting

April 22, 2019

Agenda

Exterior Building Materials

- Start with “why”
- Background and definitions
- Possible options, discussion and direction

Exterior Materials – Start with “Why”

- Why do we use and/or need exterior materials?
 - Aesthetics
 - Quality/Longevity
 - Weather protection
 - Energy Efficiency
 - Cultivate Innovation
 - Anything else? (To be determined)
- Other factors that influence “the why”
 - Advancements in technology have produced new quality materials
 - Architects/designers’ creativity is influenced by new materials available to market
 - Current ordinances limit use of new quality materials thereby potentially limiting creativity

Definitions for Consideration

- Exterior Wall Covering*: *material or assembly of materials applied to the exterior side of exterior walls for the purpose of providing a weather resisting barrier, insulation or for aesthetics, including but not limited to, veneers, siding, trim, cornices, soffits and facias.*
- Exterior Wall Envelope*: *system or assembly of exterior wall components, that provides protection of the building structural members, including framing and sheathing materials, and conditioned interior space, from the detrimental effects of the exterior environment.*

Simply stated, the exterior walls of any structure shall provide the building with a weather-resistant exterior wall envelope.

* Definitions are taken from the International Building (IBC) and the International Residential (IRC) Codes.



Definitions for Consideration

- Masonry*: A built up construction or combination of building units or materials of clay, shale, concrete, glass, gypsum or stone bonded together with or without mortar, grout or other accepted methods of joining.
- Masonry unit*: Brick, stone, architectural cast stone, glass block or concrete block.
 - Clay: A building unit larger in size than a brick, composed of burned clay, shale, fired clay or mixtures thereof.
 - Concrete: A building unit or block larger in size than 12" x 4" x 4" made of cement and suitable aggregates.
 - Glass: Non load-bearing masonry composed of glass units bonded by mortar
 - Hollow: A masonry unit with a net cross-sectional area in any plane parallel to the loadbearing surface that is less than 75% of its gross cross-sectional area measured in the same plane.
 - Solid: A masonry unit with a net cross-sectional area in every plane parallel to the loadbearing surface that is 75% or more of its gross cross-sectional area measured in the same plane.

Standard modular brick size: 3 5/8" x 2 1/4" x 7 5/8"

Standard Concrete Masonry Unit size: 16" x 8" x 8"

* Definitions are taken from the International Building (IBC) and the International Residential (IRC) Codes.

Existing Masonry Ordinances

Commercial

- Each exterior wall of a non R3 occupancy (Single Family Home or Townhome) shall be constructed with a cladding consisting of a minimum 75% masonry material.
- Masonry = natural stone, kiln fired clay brick, concrete, hollow clay tile, decorative concrete block or other similar building units, cast in place concrete, concrete tilt wall or other ***material*** approved by the Building Official.
- Products specifically not allowed – Stucco, EIFS, cementitious fiber planks or panels.
- No minimum thickness requirement.

Residential

- A minimum of 75% masonry shall be required on all elevations of the first floor. A minimum 50% masonry shall be required on the total elevations above the first floor.
- Masonry = natural stone, kiln fired clay brick, decorative concrete block or other ***masonry material*** approved by the Building Official.
 - Stucco and plaster type applications shall only be considered as meeting the masonry requirement when applied in a 3 step process over a diamond metal lath mesh to a 7/8th inch nominal thickness.
 - All other masonry materials shall a minimum 3" nominal thickness.

Materials Currently Allowed in the International Codes

Commercial (IBC)*

- **Masonry**
- **Concrete**
- Wood (Basic hardboard panel and Hardboard siding)
- Metal (Steel, Aluminum & Copper)
- Exterior Plaster (Stucco)
- Plastics
- Vinyl siding
- Fiber cement
- EIFS
- Polypropylene

Residential (IRC)*

- **Exterior Plaster (Stucco)**
- **Anchored Stone and Masonry Veneer**
- Wood Hardboard & Wood Structural Panels
- Wood Shakes and Shingles
- EIFS
- Fiber Cement
- Vinyl Siding and Insulated Vinyl Siding
- Adhered Masonry
- Polypropylene

***Bolded text** are materials that currently meet city's definition for masonry

Exterior Materials – Start with “Why (Direction Requested)”

- Why do we use and/or need exterior materials?
 - Aesthetics
 - Quality/Longevity
 - Weather protection
 - Energy Efficiency
 - Cultivate Innovation
 - Anything else?
- Things to consider:
 - Is one (or more) items noted above more important to consider than others?
 - Is there a need to regulate to achieve some or all of the above items?
 - What are we seeking to achieve?

Possible Options for Exterior Building Materials

1. Maintain existing ordinances as presented.
2. Modify existing ordinances.
 - Add to list of materials allowed as masonry
 - Change % masonry required on elevations
 - Create special overlay district
3. Abandon the term masonry and substitute “Exterior materials” or “Exterior veneer” and define what those appropriate materials are for Farmers Branch.
4. Watch the current legislative session and wait. There are currently two bills (SB 1266 and HB 2439) proposed that would prohibit the City’s ability to regulate exterior materials that are mentioned in a national model building code.



Discussion and Direction