

**INSULATION & FENESTRATION REQUIREMENTS**

CLIMATE ZONE	FENESTRATION FACTOR	FENESTRATION SHGC	CEILING R-VALUE	WOOD FRAME WALL R-VALUE
2	0.40 (MAX)	0.25 (MAX)	38 (MIN)	13 (MIN)

**Asphalt Shingles:**  
 For roof slopes of 4:12 or greater, 1 layer of 15 LB felt  
 For roof slopes from 2:12 to 4:12, 2 layers of 15 LB felt  
 (For roof slopes under 2:12, asphalt shingles are not allowed)

Wind straps at each roof framing member

1x6 Board

$\frac{3}{8}$ " Plywood soffit  
 (for fire-resistance rated soffit see dwg no. 16-02-R)

Siding

\_\_\_" Plywood

2 x \_\_\_ Rafters @ \_\_\_" o.c.

R38 Insulation

2 x \_\_\_ Ceiling joists @ \_\_\_" o.c.

2 - 2 x \_\_\_ Top plate

\_\_\_" Gypsum board

Header over window

**NOTES:**  
 1. Install wind strapping to provide continuous ties from the roof ridge to the foundation system as per appendix L of the City of Houston Residential Code  
 2. A continuous air barrier shall be installed in the building envelope, per IECC-Table R402.4.1.1  
 3. Blower door testing and duct testing will be required per IECC-sections R402.4.1.2 and R403.3.3  
 4. This wall section does not apply for walls closer than 3 feet to property line

Ceiling ht. = \_\_\_

Tie straps @ 48" max  
 (Attach Appendix L)

R13 Insulation  
 (Check energy form)

2 x \_\_\_ Floor joists @ \_\_\_" o.c.

\_\_\_" Plywood

2 x \_\_\_ Studs @ \_\_\_" o.c.

15 LB felt  
 (or other approved material per section R703.2)

\_\_\_" Gypsum board

Window sill

# 4 Bar, 5 ft long, @ 5' o.c.

Flashing

2 x \_\_\_ Treated plate

# 6 Web Wire Mesh, 6"x6" min.

24"  
 $\frac{1}{2}$ "x10" J-Bolt

# 5 Longitudinal Bars (total 6)

4" SAND

# 3 Stirrups @ 18" o.c.

4" Minimum thickness

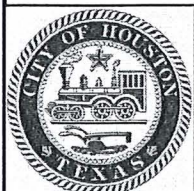
6 Mil. vapor barrier

3" Min. concrete cover

16"

Ceiling ht. = \_\_\_

- Notes:**  
 - Concrete shall have a minimum compressive strength of 3000 psi @ 28 days  
 - Use grade 60 steel bars



**STANDARD DRAWING**  
  
**CITY OF HOUSTON**  
 HOUSTON PUBLIC WORKS  
 BUILDING CODE ENFORCEMENT

**RESIDENTIAL NON FIRE RATED**  
**WALL SECTION TEMPLATE**  
 (TWO STORY - SIDING)  
  
 1002 WASHINGTON AVE., HOUSTON, TEXAS 77002

APPROVED BY: *MCH*  
  
 BUILDING OFFICIAL  
 DATE: 2/27/2020    DWG No: 20-02-R    1 of 1