



TECHNICAL BULLETIN
Community Development & Planning, Building Inspections
TOPIC:
Townhouse Firewalls – Plan Review and Inspections

The effective construction of the required fire walls in a townhouse project is a critical life safety and property protection issue. The plan review, construction and inspection of these firewalls depart from typical one- and two-family conventional construction practices. The following procedures will insure that the plan review process clarifies what must be constructed in the field and to insure that the correct inspection procedures are followed. Please note that the City of Arlington will enforce the provisions of IRC R317.2 as written.

Plan Review

Townhouses share common foundations so townhouse projects will be reviewed and issued in sets – the set is to be determined by the common foundation. If there are only two dwelling units supported by the foundation then two permit applications must be reviewed and permitted simultaneously. Each building permit application for construction of a townhouse unit must be accompanied by two (2) of the following:

1. The rating of the wall(s) to be constructed identified by a reference to the wall's listing and the details of construction of the wall(s) from foundation to the termination of the wall(s).
2. Details of the floor/ceiling joists (either parallel or perpendicular) to the fire wall(s).
3. Details of the method of construction of the parapets or the flare outs on either side of the fire wall(s).

Inspections

Each townhouse must be separated by an adjacent townhouse by a one-hour fire-resistive wall. This means that there must be two one-hour fire resistive walls placed back to back at the common property line. One common two-hour fire-resistive wall may be substituted for the two one-hour fire-resistive walls. Listed below are the required fire wall inspections based on the rating of the wall.

Two one-hour fire-resistive walls placed back to back at the common property line:

Call for fire wall inspection when:

1. First fire wall is erected and is one-sided with Type "X" gypsum and the second wall is constructed with Type "X" gypsum one-sided but is not yet erected.
2. Two story townhouses may have to call for additional fire wall inspections as the second fire wall may be erected in sections.
3. Both fire walls are erected and the soffit space is exposed and protected and the fire-resistive deck sheathing is installed. (Please note that any electrical, plumbing, and/or mechanical work that will be concealed within the fire wall must be installed and ready for inspection at this stage.)

4. Last inspection performed with the seconds (frame) inspection and the interior layer of Type "X" gypsum is completely installed on the interior of both fire walls.

One two-hour fire wall placed on the common property line

Call for fire wall inspection after any electrical work that will be concealed within the fire wall has been inspected and when:

1. Wall is framed and the first layer of Type "X" gypsum is complete and the second layer only has one course installed on side "A" of the wall only (no gypsum on the other side – this will permit the inspection of the framing of the wall).
2. Second layer of Type "X" gypsum is completed on side "A" and first layer of Type "X" gypsum is complete and the second layer only has one course installed on side "B"
3. Last inspection performed with the seconds (frame) inspection and the final layer of Type "X" gypsum is installed on side "B" and the soffit space is exposed and protected and the fire resistive deck sheathing is installed.