

**CHANGE TYPE:** Modification

**CHANGE SUMMARY:** The prescribed fire-resistance-rated separation between two dwelling units in a single building is not affected by the presence of a lot line between the units.

**2021 CODE: R302.3 Two-family dwellings.** Dwelling units in two-family dwellings shall be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating where tested in accordance with ASTM E119, UL 263 or Section 703.2.2 of the *International Building Code*. Such separation shall be provided regardless of whether a lot line exists between the two dwelling units or not. Fire-resistance-rated floor/ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.

**Exceptions:**

1. A fire-resistance rating of 1/2 hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with NFPA 13 Section P2904.
2. Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than 5/8-inch (15.9 mm) Type X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the dwellings and the structural framing supporting the ceiling is protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent.

**CHANGE SIGNIFICANCE:** Unlike townhouse unit separations, two-family dwellings (duplexes) only require a 1-hour fire-resistance-rated separation between dwelling units. It has been debated whether a lot line between

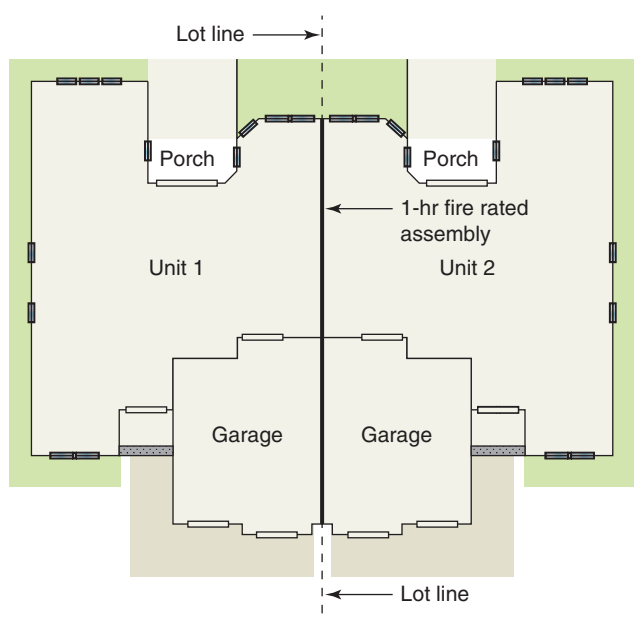
## R302.3

### Two-Family Dwelling Separation



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Two-family dwelling.

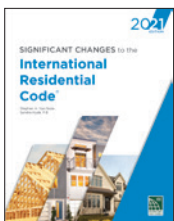


Two-family dwelling separated by lot line and 1-hr fire-resistant separation.

the dwelling units (which is common in some areas of the country and not common in others) impacts this separation requirement. The question has been whether the lot line means that the wall at the separation is considered to be an exterior wall that needs to meet the provisions of Section R302.1, resulting in two 1-hour walls at the lot line. In some jurisdictions, the answer was yes. Further, in some cases with a separating lot line, the interpretation has been that the building is no longer a two-family dwelling, but two separate detached single-family dwellings, each requiring a 1-hour wall at the lot line. In other jurisdictions, the answer was no: a duplex is a duplex no matter if the dwelling units are divided by a lot line. The reasoning behind this approach was that the fire does not know if there is a lot line there and only the 1-hour separation applies. The change to this section intends to end the debate and clarify the application of this separation. The intent of the new language is that a fire-resistance rating need never be greater than 1 hour, whether there is a lot line between dwelling units or not. For the lot line question, this brings the two-family dwelling provisions into agreement with the townhouse provisions. If the townhouse has fire sprinkler protection, a common 1-hour wall has been acceptable even if there was a lot line between townhouse units. If the exterior wall provisions in Section R302.1 were applied to townhouses, the 1-hour common wall would not be allowed.

Presumably, this change to the code allowing a 1-hour separation when there is a lot line between duplex dwelling units is meant to apply to the exception as well. The exception permits a draft stop to separate the attics of the dwelling units if other fire-resistance requirements are satisfied.

Another exception to the 1-hour separation requirement for two-family dwellings has allowed the rating to be reduced to ½ hour if a full NFPA 13 sprinkler system was installed. This exception has not been used nor would it be used because of the extra cost associated with a full NFPA 13 system typically associated with commercial structures. The cost would far outweigh any savings realized from reducing the rating from 1 hour to ½ hour. As another incentive to install a sprinkler system for areas of the country that do not adopt the IRC sprinkler provisions, a dwelling sprinkler system installed in accordance with Section P2904 or NFPA 13D now can be used to reduce the rating to ½ hour.



This excerpt is taken from *Significant Changes to the International Residential Code, 2021 Edition*. The Significant Changes series takes you directly to the most important changes that impact projects. Key changes are identified then followed by in-depth discussion of how the change affects real-world application. Photos, tables and illustrations are included to further clarify application. Available for the IBC, IRC, IFC, IECC and IPC/IMC/IFGC, the Significant Changes publications are very useful training and review tools for transitioning to a new code edition.