



# BUILDING ANALYSTS



# PARTY WALLS – SOLUTIONS, PART II

## COMMON PROBLEMS:

- **Gypsum Board** can be missing at concealed locations with missing layers or holes or gaps between sheets in attics, soffits, at intersections with other walls, behind and below tubs and other fixtures, or in the base layer below the finish layer.
- **Gypsum Board Layers** can be mis-fastened, with short nails, nails spaced too far apart, or not installed as required by the rating.
- **Draft-stops** in the attic may be damaged by other trades needing access through the attic, or may have missing pieces or gaps at narrow ends and penetrating pipes, wires and framing.
- **Wrap-backs or Returns** may be missing, or installed with gaps or missing pieces. In addition, no penetrations through the roof are allowed in this wrap-back zone. Where these wrap-backs are installed, all the framing supporting the wrap-back must be fire-protected. This protection of the framing is sometimes missing.
- **Firestopping and Blocking** can be missing at hidden locations in the wall where required to separate open spaces in the wall and adjacent construction.
- **Penetrations** are installed using non-rated materials (plastic electrical boxes, plumbing lines or wires), or installed too close to each other.
- **Seals at Penetrations**, and at adjacent construction, can be missing or of non-rated materials.

## POTENTIAL DAMAGE:

- Without proper construction material and assemblies, sound transmission between units can exceed code maximum.
- If a fire occurs in the building, it can spread through an improperly constructed party wall to the attic or adjacent floor construction, and continue to spread to other units in the building.

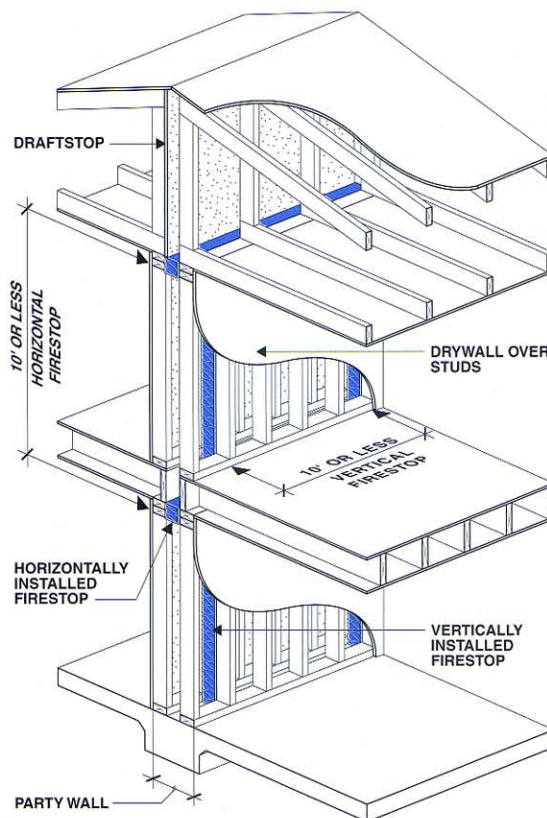
## PROPER SOLUTIONS:

Party walls must be constructed to comply with the requirements of the **Uniform Building Code**. This includes:

- If gypsum board is missing, it must be reinstalled as required by the rating. If the base layer is found incomplete, the face layers must be removed to repair the base layers. Adjacent wall and floor finishes or plumbing fixtures and cabinets may

need to be removed to access the party wall to install the proper layers. Access will be required in the attic to repair any firewalls, draft-stops and wrap-backs. All gypsum board must be properly fastened to the framing below.

- **Blocking** must be installed at all locations where found missing. Connections to adjacent construction spaces must be closed as required.
- **Firestopping** must be installed inside the wall. Wall finishes must be removed to access the interior of the wall to install the proper flexible material. An alternative approach of pumping an insulating material into the wall is sometimes used with the approval of the local Building Department. It is important to verify the proper penetration and coverage of this material inside the hidden wall cavities.
- **Penetrations** may have to be removed and replaced with a rated material. Use rated plastic or metal electrical boxes with proper backside sealants, and metal piping on conduit in any fire rated wall.
- **Sealants** must be installed at all penetrations, and to provide closure at gaps and cuts in other locations.



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