Warren Maddox on through penetrations of fire-rated assemblies.

Warren Maddox owns an independent forensic engineering firm. In his recent work, he's noticed a dangerous pattern.

“We were called in to evaluate four buildings in an apartment complex. Their concern was the code violations within the building.

“We found that many of the firewall penetrations for both the PVC sanitary and CPVC distribution lines weren't properly sealed.

“The disturbing thing was the randomness. Some had the correct seal, but many just had caulk. Or were only sealed on the sides where it was easy to reach. A number of the pipes just went through a bare hole. It's like each crew just did whatever they felt like.

“This would be the reason why, when they report a fire on the news, they say, ‘Firefighters have no idea why it spread so fast.’ Well, if you don’t seal the firewall penetrations, that’ll do it.

“Sadly, I’ve seen this same thing at multiple sites. If it was a non-combustible material, like cast iron soil pipe, there would have been no cause for concern with just caulking around the pipes.”

For uncertain or demanding applications, CISP is the more durable choice.