## **TECHNICAL BULLETIN**

## **CLOSED CELL APPLICATION PASS THICKNESS**

We have seen several instances of misinformation being propagated online regarding the maximum pass thickness for UPC 2.0 and 2.0 MAX. We have also witnessed many applicators applying these products at 3, 4, and 5 inches.

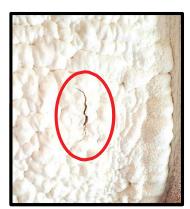
As a reminder, 2.0 and 2.0 MAX closed cell products should NEVER be applied more than 2 inches thick in a single pass. It is advised that the applicator wait at least 15 minutes or until the surface is hard to the touch before applying a second layer.

The UPC 2.0 chemistry is tuned for a maximum pass thickness of two inches. Anything beyond two inches may result in an excess exothermic reaction. This results in the plastic overheating and the cellular structure expanding and distorting beyond its design limits, compromising dimensional stability. The consequences are burnt, charred, and smelly foam, and even cracking or shrinking foam. Closed cell foam that is dimensionally unstable will succumb to "thermal shock" at the onset of cold temperatures, as the walls of the cells are strained to shrink and collapse in the cold. While the foam may appear satisfactory when first sprayed at excessive thickness, the problems may not arise for many months.

As a reminder, never recirculate closed cell foam. Always keep it stored in a tempered environment below 80°F and in an air-conditioned rig in the summertime.



2.0 MAX sprayed at 4"
The core of the foam will exhibit charring and enlarged cells with a fishy like odor.



2.0 MAX sprayed at 3.5"
in August
Initial cracking begins to
occur in Nov at first
exposure to sub-freezing
temperatures.

For any questions troubleshooting this issue, please contact us.