



***SPECIFIED  
FITTINGS***

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To Whom It May Concern:

This letter is to serve as explanation for the practice of decreasing pressure ratings for wyes. It is the specific geometry and physics of the lateral configuration that makes this de-rating necessary. There are two major relevant factors to this de-rating. First, the large area of the “run” that must be removed critically compromises the ability of the fitting to resist hoop stresses. This can be partially improved with the application of reinforcing fiberglass wrap. The second issue deals with flow through the run as it branches off through the outlet. Because the momentum of the flow through the outlet contains both lateral and focal components, there is a tendency for the branch to separate from the run; the fitting “wants” to open the angle of separation between the branch and the run. In other words, the branch is withstanding forces in the direction perpendicular to the run which may make operation impossible for higher pressures. This too can be partially controlled with the use of fiberglass reinforcement. In most cases, operating pressure of wyes is limited to 130 psi.

If you have any questions or concerns, please contact me.

Sincerely,  
Brad Sukolsky  
Specified Fittings