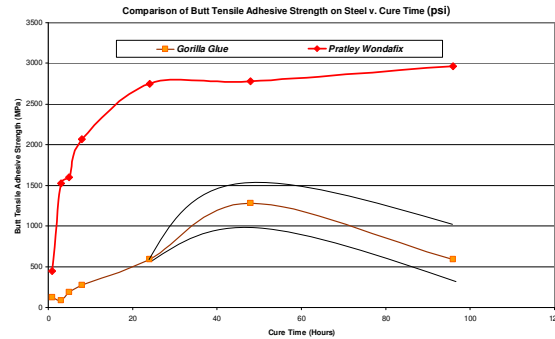




Comparison of Gorilla Glue & Pratley Wondafix



Stated Properties of Gorilla Glue (as per literature)

- Incredibly strong on wood, stone, metal, ceramic, concrete, brick, iron & aluminum.
- Harmful contains isocyanate.
- Lightly dampen one surface with water. (for dense hardwoods lightly dampen both surfaces prior to gluing).
- Spread a thin layer of Gorilla Glue onto other surface.
- Clamp objects together for 3 - 4 hours.
- After clamping the glue will expand in volume 3- 4 times over the next hour so be careful!
- Cure time 90% strength in 3 - 4 hours
- Cure time 100% in 24 hours.
- If moisture content of substrate is below 10% then dampen substrate with water.

Comparative comments on Pratley WondaFix vs. Gorilla Glue

- Pratley Wondafix is a 2-pack or 2 component reactive system which cures to a hard, flexible, high-strength rubbery polymer.
- The correct mixing ratio will always ensure adhesive strength.
- Pratley Wondafix is uniquely accelerated to provide a very high strength bond after as little as 1 hour curing time.
- Pratley Wondafix is inherently stronger on non absorbent substrates such as steel.
- Substrates glued using Pratley Wondafix need to be pressed together and do not need clamping.

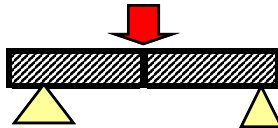


Comparative comments (continued)

- Gorilla Glue reacts with water to enable curing. Water is either pre-applied or obtained from atmospheric humidity.
- Foaming is a side effect of this reaction.
- The strength of Gorilla Glue is highly dependent on the humidity / dampness of the substrate (& how that "dampness is applied")
- Gorilla glue will have a short "shelf life" in high humidity areas. It will slowly react with moisture in its bottle and start curing.
- Gorilla glue will be much more effective on absorbent substrates such as wood but still not as strong as Pratley Wondafix. (See attached comparative graph)

Test Methods

- Butt tensile strength was determined by adhering two steel test pieces together with a bond gap of 61 μ . (2.4 thou inch) The area of the bonded pieces was 2 cm².
- An accurate bond gap was achieved by pressing the two test pieces together with a pressure of 500N per cm², using two 61 μ nichrome wires as spacers.
- The steel test pieces were broken with a Testometrics M500-25kN tensometer at a speed of 50 mm/minute. (2 inches per minute)
- "Three-Point Loading" Determination of Bond Strength of adhesives on Pine wood

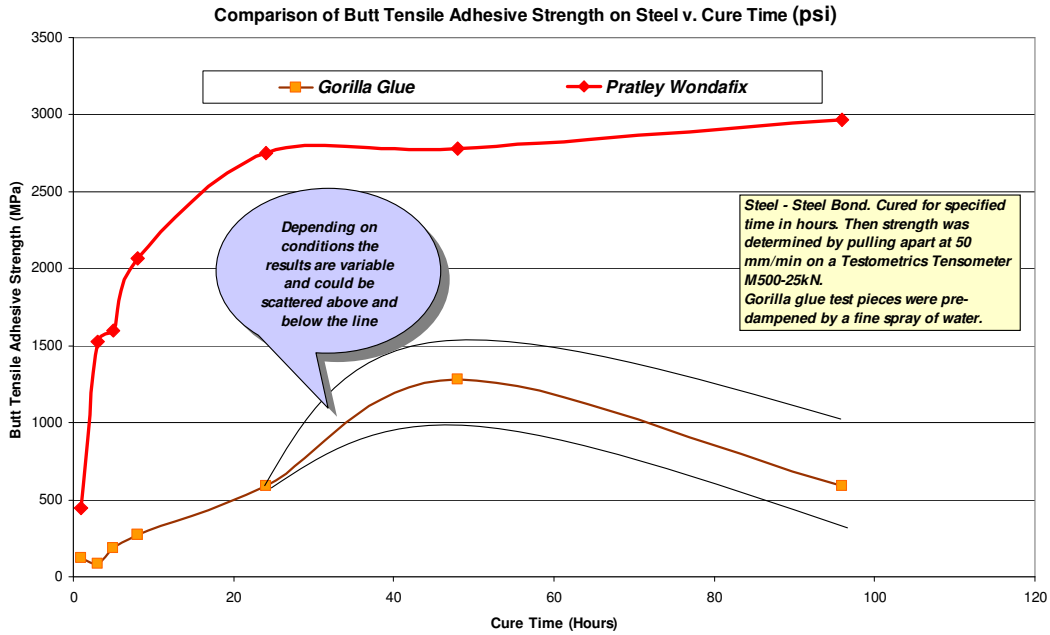


- This was determined by adhering 2 pieces of pine wood (area = 10 x 4.3 mm)
- The gorilla glue test pieces were pre-moistened & both were clamped & cured for 24 hours
- The glued test pieces were held in jig with supports 3 inches apart & the force was applied downwards using a Testometrics M500-25kN tensometer at a speed of 2 mm/minute.



The **RESULTS** are attached in graphical form.

These clearly show the superiority of Pratley Wondafix over Gorilla Glue.



3 - Point Loading on Pine WOOD, Break Strength in Pounds Force

