



LORD NEW PRODUCT LAUNCH

810/20 LOW READ-THROUGH ADHESIVE

LORD

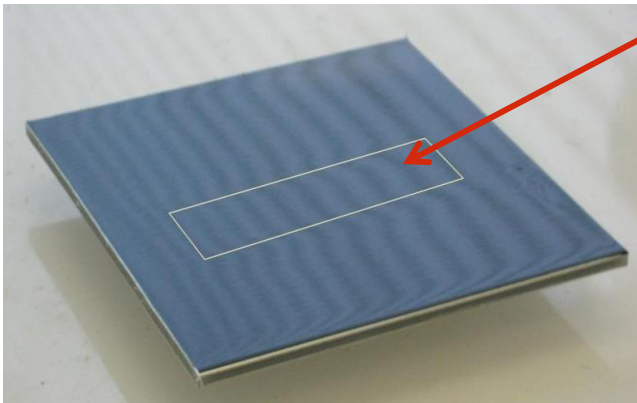
Product Overview - LRT Flexible Acrylic Adhesive

For customers that would like to have an adhesive with fast cure and no Bond Line Read Through (BLRT)

- **Excellent for fascia bonding where aesthetics matter** like sign assembly, architectural cladding, vehicle panels, and many other industrial applications
- **Bonds thin-gauge metal-to-metal and metal-to-composite/plastics**
- Competitive Low-Read through adhesives can take up to 7 days to cure—
LORD 810 LRT adhesives have handling time in as little as 20-30 minutes.

STANDARD ADHESIVE:

*SOLID ALUMINUM STIFFENER/FRAME
BONDED TO ACM PANEL*

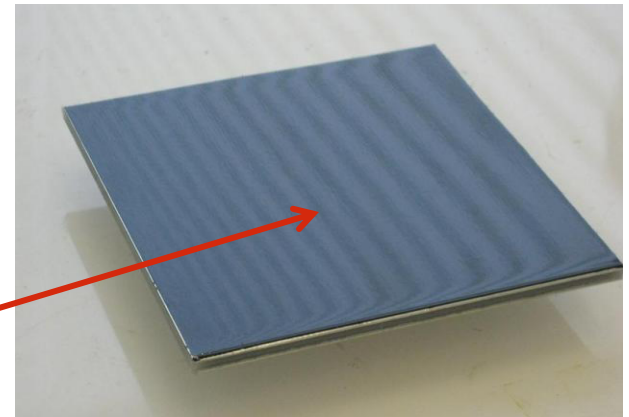


Reflection of alternating light pattern shows BLRT via distortion of the lines.

Straight lines with no distortion indicate no BLRT.

LORD 810 LRT ADHESIVE:

*SOLID ALUMINUM STIFFENER/FRAME
BONDED TO ACM PANEL*



LORD 810 LRT w/Accelerator 20

Low-Read Through Adhesive

What is it?

- Two component acrylic adhesive (2:1)
- Flexible, low exotherm, low-shrinkage, structural adhesive
- Fast cure—cures quickly even in low-temperatures
- Accelerator 20 is glass bead filled for precise bond-line control

Advantages over traditional “flexible” adhesives:

- **Aesethics** – bonds thin & flexible substrates with no bond-line read through
- **Convenient** – requires little to no substrate preparation
- Non-sagging
- Excellent peel strength

Typical Cure Properties

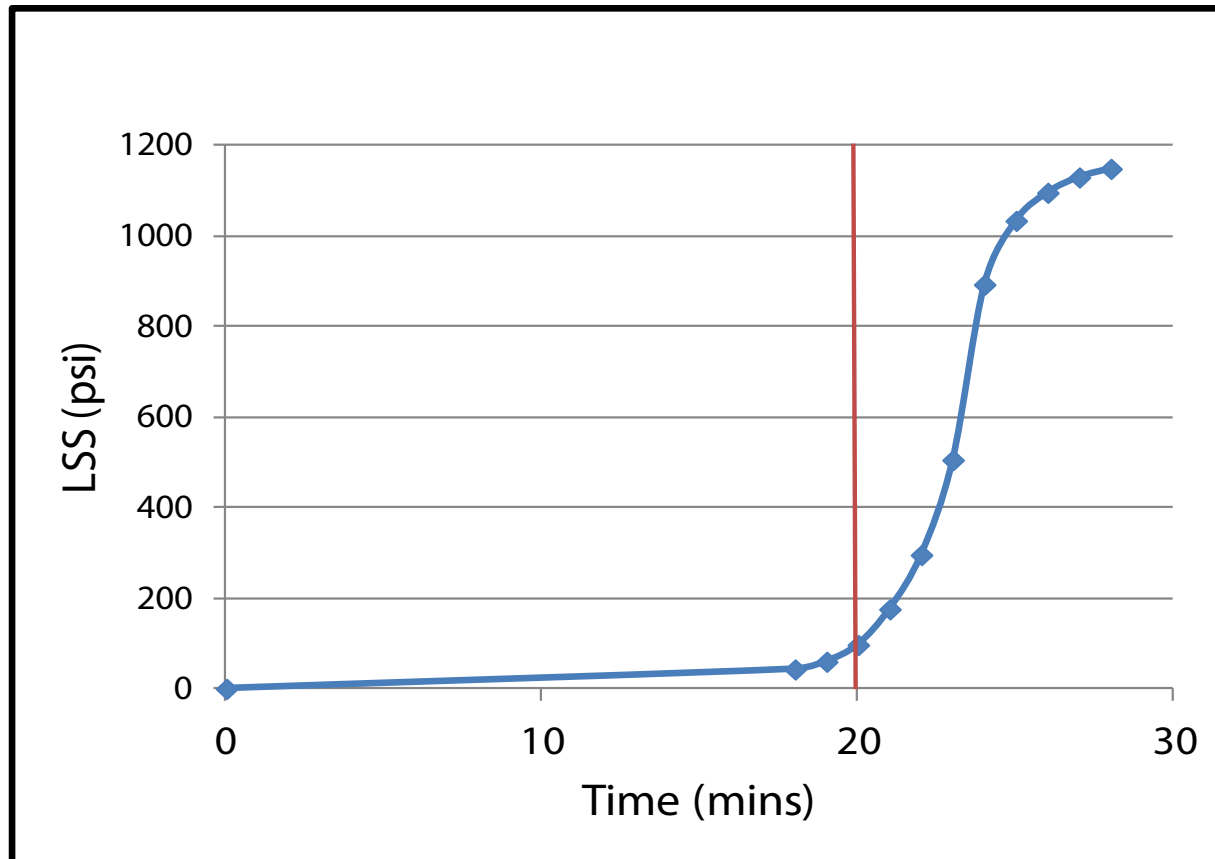
- 100% Solids
- Work Time: 8-12 minutes
- Time to Handling Strength: 20-25 minutes
- Tensile Strength: 841psi (5.8MPa)
- Elongation: 190%
- Tg: 43 C
- Shore Hardness (D): 40
- Mixed Adhesive is gray in color

Validating Strength On A Variety of Substrates

- Samples pulled at 0.5 in/min , 10 mil BLT

Test	Property	Al	HDG	EGS	CRS
LSS	psi	1223	1218	1242	1243
	Failure Mode	100COH	100COH	100COH	100COH
T-Peel	pli	44.7	49.1	53.6	57.9
	Failure Mode	100COH	100COH	100COH	95COH/5ADH
T-Peel Baked*	Pli	55.2	*175C/30 min bake		
	Failure Mode	100COH			
X-Peel**	psi	500	**Thick Al substrate		
	Failure Mode	100COH			

Tuned to Match 'Snap Cure' Associated with Most Popular LORD Acrylics



On what substrates can 810/20 LRT be applied?



SMC



Aluminum



Plastics



Electro galvanized
Steel



Cold Rolled Steel



Hot Dipped
Galvanized

How would I use 810/20 LRT?

1. Surface Preparation – Remove grease, loose contamination or poorly adhering oxides from metal surfaces.
 - Normal amounts of mill oils and drawing compounds usually do not present a problem in adhesion.
 - Commodity thermoplastics (PP/PC) may require abrading for optimum performance.
2. Mixing – Mix LORD 810 adhesive with LORD Accelerator 20 at a ratio of 2:1, adhesive to accelerator, by volume.
 - Even color distribution visually indicates a thorough mix. Once mixed, the adhesive system cures rapidly.
3. Applying – Apply the mixed adhesive to bond surfaces.
4. Fixturing – Clamp or fixture bonded components
 - Handling strength is achieved within 25 minutes at which time, bonded parts may be moved.
5. Cure
 - Complete cure is 30 min for 90% cure at room temperature. Cure rate can be accelerated by applying modest heat [$<150^{\circ}\text{F}$ ($<66^{\circ}\text{C}$)].

Recommended Applications:



*On-Highway & Off-Highway
vehicle part assembly*



Architectural Cladding



Sign Assembly

Aesthetically sensitive applications like:

- **Stiffeners** in thin-gauge aluminum, SMC, and thermoplastic substrates
- Perimeter “clamshell” assembly
- **Throughput sensitive applications** where long-cure silicones and urethanes are currently used
- **Peel strength critical applications**

Ordering Information:

3024056	LORD 810 BLK/OR DRUM LINED
3023874	LORD ACC 20 BLK/OR DRUM LINED
3024055	LORD 810 PAIL SS MT BLK
3023882	LORD ACC 20 PAIL SS MT BLK
3024170	LORD ACC 20 QUART BRN HDPE

3024093	LORD 810/20 LP-200 2:1 NYLON
3024154	LORD 810/20 CART LP-400 2:1
3024152	LORD 810/20 CART LP-50 2:1

Summary:

LORD 810/Acc 20 LRT adhesive...

- **significantly reduces Bond Line Read Through** compared to competitive alternatives and other LORD solutions
- delivers **superior peel strength** on a variety of metal and plastic/composite substrates.
- has **excellent bake resistance on thin-gauge aluminum.**
- launches in the market-place January 1, 2015