



FFI Stainless Steel Lift Slide Corrosion Resistance

...leading the industry.

Salt-spray test results show that the FFI Stainless Steel Lift Slide has superior corrosion resistance to the competitors' lift slides.

FFI Lift Slide enjoys all types of weather!

Salt-spray testing is performed to ASTM B-117 standards for 3,000 hours.



- ▶ Only FFI's Stainless Steel Lift Slide has a 15 Year Warranty against corrosion.
- ▶ FFI's Lift Slide is available in 2 grades of Stainless Steel with superior corrosion resistance.



Lift Slide Corrosion Report

1. Test Requested By: FUNCTIONAL FENESTRATION, INC.
2. Test Method: 5% Salt Spray for 3000 Hours
3. Test Standard: ASTM B-117
4. Test Agency: Korea Testing & Research Institute, By: D.H. Choi
5. Test Period: 2008.3.28 < 8.4 . Report Date: 2008.8.18 .
6. Product Name: LS Roller, Drive Gear (G-U, AGB, FFI. 1 Set / Each Company)
7. Results:



Item		Company			
		G-U	AGB	FFI (304)	FFI (439/430 *)
CORNER DRIVE CARRIAGE	Rust Condition	Whole carriage corroded	Whole carriage corroded	Minor surface corrosion	Some surface corrosion
	Operating Condition	Cannot operate	Cannot operate	Good	Good
DRIVE GEAR LOCK	Rust Condition	Whole gear corroded	Whole gear corroded	Minor surface corrosion	Some surface corrosion
	Operating Condition	Cannot operate	Cannot operate	Good	Good

8. Conclusions:

* 430 and 439 are very similar

1) **FFI Product**

Small amounts of corrosion, however general condition of product is good.
Corrosion is not causing problems to operation and function.



2) **G-U, AGB Product**

Whole product was contaminated by corrosion and rust.
Corrosion caused critical problems for function; product was impossible to operate.

Manufacturer : G-U



Item : CORNER DRIVE

- 1) BODY : Plating was corroded, There is serious white rust.
- 2) BAR : Plating was corroded, There is rust.
- 3) BEARING : Corrosion
- 4) OPERATION : cannot roll because corroded plate is stuck between roller and housing



item : DRIVE GEAR

- 1) GEARBOX : Plating was corroded, there is serious rust.
- 2) AL SASH : Severe corrosion
- 3) OPERATION : Impossible

Manufacturer : AGB



Item : CORNER DRIVE

- 1) BODY : Plating was corroded, there is serious white rust.
- 2) BAR : Plating was corroded, there is rust.
- 3) BEARING : Corrosion
- 4) OPERATION : cannot roll because corroded plate is stuck between roller and housing



Item : DRIVE GEAR

- 1) GEARBOX : Plating was corroded, there is serious rust.
- 2) AL SASH : Severe corrosion
- 3) OPERATION : Impossible

Manufacturer: FFI (3G), Material: Stainless Steel 304



Item : CORNER DRIVE

- 1) BODY : Minute corrosion
- 2) BAR : No corrosion
- 3) BEARING : Minute corrosion
- 4) OPERATION : No problem



Item : DRIVE GEAR

- 1) GEARBOX : Minute corrosion
- 2) AL SASH : No corrosion
- 3) OPERATION : No problem

15-years FFI Warranty
for **304** Stainless Steel System
against defects and corrosion
failure.

Manufacturer: FFI (3G), Material: Stainless Steel 439 (430)



Item : CORNER DRIVE

- 1) BODY : Some corrosion
- 2) BAR : Minute corrosion
- 3) BEARING : Some corrosion
- 4) OPERATION : No problem



Item : DRIVE GEAR

- 1) GEARBOX : Some corrosion
- 2) AL SASH : Some corrosion
- 3) OPERATION : No problem

15-years FFI Warranty
for **430** Stainless Steel System
against defects and corrosion
failure.

Within 5 miles of seacoast,
warranted 2 years for corrosion
failure.

Tae-Bum Kim

Prepared by Tae-Bum Kim
Tel: +82-32-570-9711
E-mail: tb1122@ktr.or.kr

Ho-Myung Jang

Reviewed by Ho-Myung Jang
Technical Manager
E-mail: mjang@ktr.or.kr

Aug.04.2008



Korea Testing & Research Institute

President *Kisung Cho*