



## Farabaugh Engineering and Testing Inc.

April 28, 2008

Ultra Aluminum Mfg., Inc.  
2124 Grand Commerce Drive  
Howell, MI 48855

Attn: Russell Springborn

Re: Handrail Testing

The purpose of this letter is to provide a summary of testing on the above referenced product.

### TEST SUMMARY

FET Project No. T168-08

Manufacturer: Ultra Aluminum Manufacturing, Inc.

Test Specimen: - 42" high X 12' long - 2 Rail Aluminum Handrail System  
- Continuous Top Rail with Rail Ends (attached to steel frame)  
- 2" X 2" aluminum center post  
- 3/4" X 3/4" aluminum balusters (pickets) @ 4" oc

#### In-fill Load Test

- 125 lb load applied to balusters over a 1-square ft. area normal to the in-fill  
Results: No Failure

#### Uniform Load Test

- 175 lb/ft uniform load applied 45 deg. From horizontal (outward & downward)  
Results: No Failure

#### Concentrated Load Test

- 500 lb load applied midspan at the top rail  
Results: No Failure
- 500 lb load applied at top of center post  
Results: No Failure

Refer to FET test report Project No. T168-08 for specific handrail details and test data.  
If you have any questions, please contact the undersigned.

Sincerely,

Patrick J. Farabaugh, PE  
Vice President

