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Subject: Evaluation of C R Laurence 487 Series Aluminum Frame for the purpose of establishing listing criteria based on test data contained in Intertek report 102288099MID-002.

This letter represents the results of the evaluation of the above referenced subject to the requirements contained in the following standard: UL10C (2015), CAN / ULC S104 (2015) and NFPA 252 (2012).

One pair of swinging doors with the subject aluminum frame of nominal size 8' wide x 8' high was tested for fire endurance. The assembly consisted of Listed 20 minute wood particle board core fire rated fire doors and the subject C R Laurence aluminum frame. The assembly included two strips of HSS2000 on all sides of the perimeter of the door except for the inactive hinge side which only had one strip. Two strips were also applied to the meeting edge. The assembly did not qualify for a "20 minute" rating due to late in the test flaming (19:05 minutes) on the unexposed surface at the top hinge corner of the inactive door. No hose stream test was conducted. It should be noted that the flaming occurred on the side of the assembly that received only one strip of HSS2000. All other criteria required for a "20 minute without hose" rating had been met. It is Intertek's judgement that modification of the assembly so that all perimeter and meeting edge locations have two strips of HSS2000 would further protect the door edge by further sealing the frame to door edge, thus eliminating possibility of flaming in this location and the assembly would thus qualify for Listing with a rating of "20 minute without hose stream".

*Authorities Having Jurisdiction (AHJ) should be consulted in all cases as to the particular requirements covering the installation and use of Intertek certified products, equipment, systems, devices and materials. The AHJ should be consulted before construction. Fire resistance assemblies and products are developed by the design submitter and have been investigated by Intertek for compliance with specific requirements. The published information (product and design listings) cannot always address every construction nuance encountered in the field. When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the test standard referenced for each Intertek certified product. The test standard includes specifics concerning alternate materials and alternate methods of construction. Only products which bear Intertek's Mark are considered as certified. The appearance of a company's name or product in Intertek Directory of Listed Building Products does not in itself assure that products so identified have been manufactured under Intertek's Follow-Up Service. Only those products bearing the Intertek Mark should be considered to be Listed and covered under Intertek's Follow-Up Service. Always verify the Mark on the product before using it.*

Conclusion

Intertek has conducted this product evaluation for C R Laurence, on C R Laurence 487 Series Aluminum Frame, to evaluate fire resistance for the purpose of establishing listing criteria. The evaluation was conducted to determine if modification to the test assembly that would require all perimeter and meeting edges to contain two strips of HSS2000 would result in an assembly that qualifies for Intertek Certification by showing compliance with UL10C (2015), CAN / ULC S104 (2015) and NFPA 252 (2012).

Based on the information contained and referenced herein, it is Intertek's professional judgment based on sound engineering principles that the following is true:

- C R Laurence 487 Series Aluminum Frame in assembly with Listed fire rated wood doors with installation requiring two strips of HSS2000 on meeting edge all perimeter surfaces qualifies for Intertek Listing as a fire door frame with a rating of "20 Minutes without Hose"

This letter report completes our evaluation. If there are any questions regarding the results contained in this report, or any of the other services offered by Intertek, please do not hesitate to contact us at Intertek.

Completed by: John Schachtner  
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