FREQUENTLY ASKED QUESTIONS

These questions and answers are meant to be general in nature. Please contact the window manufacturers for specific information about steel windows and doors.

1. **Q**:**What are the differences between hot rolled and cold rolled steel?**
   A: Hot rolled steel windows and doors are made from solid steel sections which have been hot rolled from new billet steel into shapes specifically designed for window and door frames and ventilators. Cold rolled steel windows and doors are made from hollow steel sections, which have been mechanically cold formed from flat sheets of 20 gauge or thicker cold rolled steel into specially designed profiles that are designed for window and door frames and ventilators.

2. **Q**:**How large can steel windows and doors be?**
   A: Steel windows and doors are custom manufactured on a project-specific basis and are often chosen for their ability to fill very large openings while maintaining narrow sightlines. Due to the inherent strength of steel, steel windows and doors can be made as large or larger than any other conventional window and door system available.

3. **Q**:**How does the life cycle of steel windows (or doors) compare to aluminum, wood, or vinyl windows (or doors)?**
   A: The inherent strength and durability associated with steel windows and doors results in a product that outperforms any other window material – aluminum, wood or vinyl.

4. **Q**:**Do you use recycled materials to make steel windows?**
   A: Hot rolled steel windows are manufactured from steel window sections made of 100% recycled steel.

5. **Q**:**Are steel windows and doors available with a thermal break?**
   A: Steel windows and doors are offered with or without a thermal break. Consult individual members for information.

6. **Q**:**What is the condensation resistance (CR) for steel windows and doors?**
   A: The condensation resistance (CR) of steel windows and doors will vary depending on the size and configuration of the unit, as well as the type of glass. Consult individual members for specific information.

7. **Q**: **Are steel windows and doors thermally efficient?**

A: Yes, steel windows and doors are thermally efficient. As an example, the thermal resistance of steel is 5 times greater than that of aluminum.
The strength of steel affords narrow sightlines, thus reducing the ratio of glass to framing. The more glass there is in a window or door, the better the U-value.

8. **Q**: **What are the U-values for steel windows and doors?**

A: U-values vary depending on the type and thickness of glass and the framing material used. The U-value for steel windows is calculated for the entire window, including frame material and the glass, and incorporates the style of window, fixed or operable. The U-value can be either physically tested or simulated with a computer program. The combination of the minimal framing profiles of steel, the low coefficient of heat transfer, and larger glass areas will produce industry acceptable U-values. Consult individual members for specific information.

9. **Q**: **What types of pretreatment and finish paint are available for steel?**

A: Pre-treatment options include e-coat or galvanizing, and finish paints include enamels, polyurethane, and powder. Consult individual members for more specific information.

10. **Q**: **How long should a paint finish last?**

A: A paint finish with minimal amount of care can last 10-15 years depending on environmental conditions. Consult individual members for care recommendations.

11. **Q**: **What is E-coat?**

A: E-coat is an immersion painting process in which charged paint particles are attracted to an oppositely charged metallic surface. The E-coat system applies a DC charge to a metal part immersed in a bath of oppositely charged paint particles. The paint particles are drawn to the metal part and paint is deposited on the part, forming an even, continuous film over the entire surface, until the coating reaches the desired thickness. At that thickness, the film insulates the part, where attraction stops and the process is complete.

12. **Q**: **Is it true that aluminum glazing beads react poorly to steel?**

A: No. Paint finishes prevent any corrosive interaction between dissimilar metals.

13. **Q**: **What is involved in glazing steel windows and doors?**
A: Steel windows and doors are typically glazed using glazing tape, glazing wedge, setting blocks, custom pre-fitted glazing beads and a cap bead of sealant.

14. **Q**: **What types of glass can be used in a steel window?**
A: Steel windows can accommodate glass thicknesses ranging from 1/8" to 1-1/4", including single pane, laminated or leaded glass, and most any of the high performance insulated glass products currently available.

15. **Q**: **How easy is it to replace broken glass in a steel window?**
A: Steel windows are generally provided with continuous snap-in glazing beads which can be easily removed to replace the broken glass and reinstalled with new glazing materials.

16. **Q**: **Why are windows/doors shipped without glass?**
A: Due to large custom sizes of steel windows and doors, ease of handling and installation makes field glazing more practical.

17. **Q**: **What are egress windows?**
A: In the event of a fire, egress windows provide an opening large enough to allow occupants to escape, or to allow a fully-equipped firefighter to enter from the outside. The International Codes specify the minimum clear opening width for an egress window at 24 in.; the minimum clear opening height is 20 in., and the net clear opening requirement is 5.7 sq. ft. To comply with the Codes, an egress window must be set with a maximum sill height of 44 in.

18. **Q**: **Can egress windows be made out of steel?**
A: Absolutely! Please contact our member companies for available designs.

19. **Q**: **Can steel windows meet window fall prevention requirements?**
A: Yes. The windows can easily be limited to the required clear opening restriction, yet can be released for cleaning.

20. **Q**: **What types of screens are available for steel windows?**
A: Insect or security screens are available.