



Enclosure Material	Composition	Construction	Typical Installation	Environmental Considerations	Strengths	Weaknesses
Polycarbonate	Thermoplastic polymer	Thermoset	Indoor and outdoor	Greater impact and UV Resistance than fiberglass.	Light weight, will not dent, easy to modify, modifications more accurate than fiberglass, no touchup after cutting or drilling. Does not block RF.	Extended UV exposure can cause yellowing. Requires accessories for heat transfer. Low scratch resistance.
Fiberglass	Glass reinforced polyester	Thermoset	Indoor and outdoor	Lightweight and corrosion resistant.	Light weight, will not dent, easy to modify, no touchup after cutting or drilling. Does not block RF.	Extended UV exposure tends to fade color
Carbon Steel	Typically hot or cold rolled steel	Formed sheet steel with welded seams	Primarily Indoor	Typically powder coated surface offers limited resistance to corrosives	High strength. Carries heavier loads. Least expensive enclosure option.	Modifications can be difficult and require touchup to prevent corrosion. Requires accessories for heat transfer. Can be dented.
304 Stainless Steel	Approximately 8-10.5% nickel and 18-20% chromium by weight. Also contains manganese, silicon and carbon	Formed sheet steel with welded seams	washdowns, indoor and outdoor applications	Increased resistance to oxidation and most solvents, alkalis and some acids compared to carbon steel	High strength. Carries heavier loads. Corrosion resistant.	Dents easily. Difficult to cut and drill. Expensive.
316 Stainless Steel	Same as 304 stainless steel, but also molybdenum	Formed sheet steel with welded seams	Indoor and outdoor use. High thermal conductivity	Addition of molybdenum greatly increases corrosive resistance including chlorine, sea water, sulfates, bromides.	High strength. Carries heavier loads. High corrosion resistance.	Dents easily. Difficult to cut and drill. Most expensive enclosure option.

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