

Metal bastion defense system shall meet the following minimum specifications:

1. Depth: 1 meter to 1.50 meters thick. Our field experience is that at most sites depth is limited to one bastion width due to space limitation. For the purpose of this project this is a consideration, therefore the thickness of the wall is limited to the dimension of one bastion and must comply with the above.
2. Height: minimum 2.4 meters; allows for manufacturers standard product dimension variation, as measured from the ground level. .
3. Length: (3.0) meters long; plus or minus 10% to allow for each manufacturers standard product dimension.
4. Bastion systems shall provide 360 degree fire proof protection, and shall provide adequate resistance against external environmental factors (e.g., humidity, sea salt, excessive wind, fungus, mold, ultra-violet radiation). All surfaces shall be resistant to corrosion.
5. Bastion systems shall serve as a blocking system for external visual observation, and shall be able to effectively mitigate damage from direct and indirect fire weapon attacks (to include but not restricted to 5.56, 7.62, .50 cal, 40mm HE grenades and withstand the impact of a minimum 40lb explosive net weight charge at no more than 3 meters from the base of the wall without resulting in structural collapse.
6. The bastion defense system provided shall be able to withstand covering by wild plants, mold and fungus without reducing or compromising the structural security and stability of the structures. The sides and surfaces of each installed component shall be able to prevent any adverse affects from the root growing process of plants that may grow to cover the surfaces.
7. Panel color will be either sand, green, gray or white.
8. Bastion system shall be easily transported and assembled utilizing a panel system with minimum onsite labor required for bastion assembly (a 3 linear meter section of bastion should be fully assembled -- not including fill -- in no more than 20 mins by a basic 4 man work crew.
9. Following installation, the bastion defense systems shall be easily maintainable without the need to disassemble any of the components. Due to the nature of the requirement, all damages shall be corrected using the same materials as were used in the original construction. All damages shall be repairable in such a manner so that the repaired bastion defense system has the same resistance and level of protection as before the damage occurred.

10. The bastion defense systems should remain stable and provide the required level of force protection for a minimum period of 5 years. During the 5 year period following installation, the defense systems shall be able to retain their anti corrosive quality, structural and protective properties.