

Reinforcement Decision Matrix

Table 1 depicts the four criteria the team used in determining the best primary reinforcement.

Table 1: Reinforcement Decision Matrix

Criteria	Weight Factor	White/Green Stucco Fiberglass Mesh	HexForce Fiberglass Mesh	Chicken Wire	Geogrid
Flexibility, Workability, Molding w/ Shape of Canoe	0.30	0.60	0.90	0.3	0
Weight	0.10	0.30	0.30	0.30	0.30
POA	0.15	0.45	0.45	0.45	0.45
Bonding with Concrete	0.45	0.9	0.00	0.90	0.00
TOTAL	1.00	2.25	1.65	1.95	0.75

Table 2 provides reasoning behind the shown criteria.

Table 2: Reinforcement Criteria Reasoning

Material	Reasoning
Flexibility, Workability, Molding w/ Shape of Canoe	In order to receive a 3 (highest value), the reinforcement needed to be easily handled in order to ensure safety and effectiveness.
Weight	In order to receive a 3 (highest value), the reinforcement needed to meet weight restrictions set forth by the team that would not add to the overall weight of the canoe.
POA	In order to receive a 3 the reinforcement needed to have the highest cross-sectional area and comply with the rules and regulations.
Bonding with Concrete	In order to receive a 3 (highest value), the reinforcement needed to easily bond with concrete.