

Chair (Seating Material)						
	Material Name	Weight (per cc^3)	Elastic Modulus(ksi)	Tensile Strength (Psi)	Shear Strength (psi)	Corrosive?
1	Fiberglass	2.49		20500		No
2	Gel coated Fiber Glass	2.49		20500		No
3	Acrylic Optic Grade	1.2		5510-13000		No
4	Polyamides					
5						
Chair (Frame)						
	Material Name	Weight (per cc^3)	Elastic Modulus(ksi)	Tensile Strength (Psi)	Shear Strength (psi)	Corrosive?
1	Carbon fiber	1.6		15954		No
2	Aluminum	2.69		40000		No
3	Acrylic Optic Grade	1.2		5510-13000		No
4						
5						
Base (excluding steel fixture for extendable pillar and sunction cups)						
	Material Name	Weight (per cc^3)	Elastic Modulus(ksi)	Tensile Strength (Psi)	Shear Strength (psi)	Corrosive?
1	Fiberglass	2.49		20500		No
2	Carbon Fiber	1.6		15954		No
3	4140 Carbon Alloy Steel (Annealed)	7.85		60200		No
4	Polyurethane Alloy	0.970-1.40		1740-9720	4930-7690	
5	Acrylic Optic Grade	1.2		5510-13000		No
Scissor Legs						
	Material Name	Weight (per cc^3)	Elastic Modulus(ksi)	Tensile Strength (Psi)	Shear Strength (psi)	Corrosive?
1	A36 Steel	7.85		36300		Yes
2	4140 Carbon Alloy Steel (Annealed)	7.85		60200		No
3	Stainless Steel	0.19-9.01	11200-46000	6150-348000		No
4	Medium Carbon Steel	7.75		65300-396000		No
5	Acrylic Optic Grade	1.2		5510-13000		No
Arm Rest						
	Material Name	Weight (per cc^3)	Elastic Modulus(ksi)	Tensile Strength (Psi)	Shear Strength (psi)	Corrosive?
1	Gel Coated Fiber Glass	2.49		20500		No
2	Polyamides					
3	Acrylic Optic Grade	1.2		5510-13000		No
4						
5						
Extendable Arm						
	Material Name	Weight (per cc^3)	Elastic Modulus(ksi)	Tensile Strength (Psi)	Shear Strength (psi)	Corrosive?
1	A36 Steel	7.85		36300		Yes
2	4140 Carbon Alloy Steel (Annealed)	7.85		60200		No
3	Stainless Steel	0.19-9.01	11200-46000	6150-348000		No
4	Medium Carbon Steel	7.75		65300-396000		No
5	Acrylic Optic Grade	1.2		5510-13000		No