



# Appendix A

## Solution Area I

### A.1 – Diagrid material comparison chart

**Material Comparison Chart**

Material	Mat. Cost	Availability	Lead time	Erect. time	Flexibility	Durability	Weight	Labor Cost	Fire Resist.	Size
Wide Flanges	75	100	75	100	80	90	100	100	70	95
Rectangular HSS	75	95	75	100	80	90	90	100	70	95
Round HSS	75	95	75	100	80	90	90	100	70	100
Glulam Timber	40	80	75	100	50	40	60	90	80	50
Precast	60	100	90	75	100	100	30	75	100	70
Cast-in-place	100	100	100	60	100	100	30	60	100	70
	1.0	0.5	0.6	0.8	0.7	0.8	1.0	1.0	0.9	0.9

Material	Score	Rank
Wide Flanges	88.6	1
Rectangular HSS	87.1	3
Round HSS	87.6	2
Glulam Timber	65.7	6
Precast	77.1	5
Cast-in-place	79.4	4