

# Team Yellow Wall Ace Product Contract

Needs	Component	Attribute	Metric	Unit	Value	Person
Easy to transport	Posts	Fit in a standard sized car	Post min. height	ft	< 7	Fiona, Jeremy, Rane
		Can be carried by 1 person	Weight	lbs	<20	Fiona, Jeremy, Rane
	Panels	Fit in a standard sized car	Panel width	in	</= 36	Caitrin and Kelly
		Fit in a standard sized car	Panel height	in	</= 36	Kelly and Caitrin
	Top Molding	Fit in a standard sized car	Width	in	</=36	Helen, Caitrin, Kelly
Easy to Install	Posts	Guided set up	Constrained in x, y, & z direction?	binary	Yes/No	Laura
		Quickly set up	Time to set up post	min	<10	Karlen
	Panels	Quickly set up	Time to install one section of panels	min	<3	Michael
		Weight	Panel weight	lbs	<5	Caitrin and Kelly
	Doors	One or two people can install	Weight of door	lbs	<30	Esther, Alex, Eugene
	Endcap	Fine adjustment can be tightened with the strength of	Torque to tighten endcap	N-m	0.3N-M	Rane
Structurally Stable/ No damage	Posts	Does not buckle under compression necessary to hold	Deformation of post (in any direction)	in	<0.1	Fiona, Jeremy, Rane
	Panels	Won't fall out when you push on it	Force normal to wall which the panel withstands	N	>445	Caitrin
		Supports upper panels	Sit flush with bottom of floor	binary	yes/no	Kelly and Caitrin
			Load capacity in vertical direction	lbs	<40	Caitrin and Kelly
	Doors	Attachments must hold up the weight of the door	Load capacity of door attachments	lbs	>30 (or weight of door)	Esther, Alex, Eugene
	Endcap	Force on ceiling	Force	N	70<x<200 N	Sherife
		Friction force is sufficient to keep post up	Friction force	N	>360	Fiona, Jeremy, Rane
Vertically fits the space	Posts	height spans necessary range	Post obtainable heights	feet	7-10 ft	Fiona, Jeremy, Rane
	Top Molding	Covers gap between top of wall and ceiling	Height	inches	>6	Helen, Caitrin, Kelly
	Doors	Fits interior door specs	width and height	inches	34" X 84"	Esther, Alex, Eugene
Reasonably Soundproof	Panels	Materials	Sound Transmission Class Rating	STC	>30	Esther, Alex, Eugene
	Top Molding	No air gap between ceiling and wall	Flush against the ceiling	binary	yes/no	Helen, Caitrin, Kelly
	Doors	Appropriate materials, no gaps	STC rating	STC	>30	Esther
Must be fire safe	All	Materials	Pass the UL 72 fire resistance test	binary	yes/no	Caitrin