



		Ramset-I-F	STICK PINS	PAT
SYSTEM COMPATIBILITY	INSULATION TYPE			
	<i>Rigid</i>	Yes	Yes	Yes
	<i>Semi-rigid (rockwool)</i>	Yes	Yes	Not Recommended
	<i>Delta membrane + insulation</i>	Yes	No	No
	<i>Insulation thickness</i>	1" to 6"	1" to 6"	1" to 4-3/4"
	<i>Washer incremental</i>	1/2" increments 1-4" 1" increments 4-6"	Random	Not relevant (metric)
	<i>Insulation compression @ fastener</i>	No	Yes	Yes
	SUBSTRATE COMPATABILITY			
	<i>Concrete</i>	Yes	Yes	Yes
	<i>Hollow Block</i>	Yes	Yes	No
	<i>Steel</i>	Yes	Yes	Yes
	<i>Gypsum board + steel stud</i>	Yes	Yes	No
	<i>Vapor membrane</i>	Yes	Not Recommended	No Published
<i>Wood Frame</i>	Yes	No	No	
STRENGTH	PULLOUT STRENGTH (ULTIMATE - LBS)			
	<i>Concrete</i>	211	6	240
	<i>Hollow Block</i>	184	6	-
	<i>Steel</i>	360	6	387
	<i>Gypsum board + steel stud (20Ga)</i>	200	6	-
LABOR	<i>Productivity (avg 1,000 sqft)</i>	20 min	2 days 6h	24 min
	<i>Surface preparation</i>	No	Cleaning + Chalk Lining	No
	<i>Working Temp (F)</i>	0 to 113	30.2 to 104	-4 to 113
	<i>Cure Time</i>	No	48h	No
	<i>Health Hazards & VOC Emissions</i>	0	404.5 g/L	Lead exposure + fatigue
	<i>Licensing Required</i>	No	No	Yes
	<i>Operator Fatigue</i>	Low fatigue	High	High
	<i>Price (Material +Labor-avg/sqft)</i>	\$0.62	\$0.67	\$0.62
THERMAL PROPERTIES	<i>Water Infiltration / Condensation Risk</i>	Low	High	Low
	<i>Thermal Efficiency (6")</i>	99.4%	89.6%	77.7%