

# Sustainability Tables



Related USGBC LEED Credits	MR 4		EQ 4			MR 5
Product Family:	Post-Consumer	Pre-Consumer	Content or CHPS	Formaldehyde & VOC Emission	Approx. Density lbs./cu.ft.	Raw Materials (percentage by weight) Values based on average during: 2009 January through December
Steel framing	0	25%				Steel: (material location varies both US and international)
Paper tape	0	0				Paper: manufactured at Gypsum, OH; (paper from Georgetown, SC)
Glass fiber tape	0	0				Fibrous glass
Paper-faced bead	0	25%				Steel, Paper, Adhesive: manufactured in Auburn, WA & Weirton, WV.
Metal bead	0	25%				Steel: (material location varies)
SHEETROCK® BRAND FIRST COAT	0	0	< 50 g/L			40% Water, 20% Polymer, 20% Clay, 10% Limestone: manufactured at Gypsum, OH
SHEETROCK® COVER COAT™ compound	0	0	< 2 g/L.		105	50% Limestone, 30% Water, 5% Mica, 5% Latex, & 5% Attapulgite: Manufactured at East Chicago, In; Port Reading, NJ; & Jacksonville, FL.
SHEETROCK® Joint compound – Ready mix (drying type)	0	0	< 2 g/L.		67-105	50% Limestone, 30% Water, 5% Mica, 5% Polymer Emulsion, & 5% Clay: <b>North East Plants:</b> Baltimore, MD; Gypsum, OH; & Port Reading, NJ. <b>South Central Plants:</b> Bridgeport, AL; Chamblee, GA; East Chicago, IN; Fort Dodge, IA; & Jacksonville, FL. <b>Western Plants:</b> Auburn, WA; Dallas, TX; Galena Park, TX; Phoenix, AZ; Sigurd, UT; & Torrance, CA. <b>Canadian Plants:</b> Hagersville, Ontario; Montreal, Quebec; Calgary, AB.; Surrey, BC.
SHEETROCK® Joint Compound – Setting Type	0	0	NA		40-80	60% Plaster of Paris, 20% Limestone & 10% Mica-only in the U.S.: <b>(Mixed on Job Site)</b> <b>North East Plants:</b> Gypsum, OH (plaster from Fort Dodge, IA); & Port Reading NJ (plaster from Fort Dodge, IA). <b>South Central Plants:</b> Chamblee, GA (plaster from Southard, OK); East Chicago, IN (plaster from Fort Dodge, IA); Fort Dodge, IA (plaster onsite); & Southard, OK (plaster onsite). <b>Western Plants:</b> Auburn, WA (plaster from Mexico); Dallas, TX (plaster from Southard, OK); Phoenix, AZ (plaster from Southard, OK); & Torrance CA (plaster from Southard, OK). <b>Canadian Plants:</b> Hagersville (plaster from ); Montreal (plaster from ); Surrey (plaster from).
SHEETROCK® TUFF-HIDE™ primer-surfacer	0	0	< 50g/L		100	90% Polymer Emulsion, <5% Silica, <5% Talc: manufactured at Gypsum, OH; Dallas, TX; Jacksonville, FL; or Phoenix, AZ.
MICORE™ 160 & 300 panels (12% rapid renewable content.)	19%	37%	Pass	Low	3	28% Perlite, 12% Starch, Clay; 4%, 37% Mineral Wool from Red Wing, MN; 19% recycled paper: manufactured at Cloquet; MN
USG DOWN® Brand AX™ Aluminum Suspension System	68	22				Recycled Aluminum: manufactured at Oakville, Ontario, Canada.
USG DOWN® Brand Hot-Dipped Galvanized Steel, and Stainless Steel Suspension Systems	25 to 50%	6 to 8%				US and foreign steel: manufactured at Cartersville, GA; Oakville, Ontario, Canada; Stockton, CA and Westlake, OH (Steel can specify US material, paint locally supplied). See USG Design Studio LEED Report Tool for specific information: ( <a href="http://www.usgdesignstudio.com/LEEDreport.asp">http://www.usgdesignstudio.com/LEEDreport.asp</a> )
SHEETROCK® Acoustical sealant	0	0	15 g/L			Limestone, Water, Polymer Emulsion: manufactured at Toronto, Ontario, Canada
SHEETROCK® FIRECODE® Brand Compound	0	0	NA			60% Plaster of Paris, 20% Limestone & 10% Mica: <b>(Mixed on Job Site)</b> Manufactured at Gypsum, OH (plaster from Fort Dodge, IA)

# Sustainability Tables



Related USGBC LEED Credits	MR 4		EQ 4			MR 5
Product Family:	Post-Consumer	Pre-Consumer	Content or CHPS	Formaldehyde & VOC Emission	Approx. Density lbs./cu.ft.	Raw Materials (percentage by weight) Values based on average during:2009 January through December
FIRECODE® Brand Acrylic Firestop Sealant	0	0	35 g/L			45% Polymer Emulsion, 40% Water: Manufactured in Toronto, Ontario, Canada
FIRECODE® Brand Acrylic Firestop Spray Sealant	0	0	50 g/L			50% Polymer Emulsion, 40% Water: Manufactured in Toronto, Ontario, Canada
FIRECODE® Intumescant Acrylic Firestop Sealant	0	0	50 g/L			35% Polymer Emulsion, 35% Water, 20% Limestone: Manufactured in Toronto, Ontario, Canada
DUROCK™ cement board	0	10%			72	40% Aggregate, 45% Portland cement, 10% Fly Ash, & 5% Other; <b>DUROCK™ Next Gen</b> : 50% Portland cement, 22% Aggregate, 8% Perlite, 15% Fly Ash, & 5% Other: manufactured at Baltimore, MD; Detroit, MI; New Orleans, LA; Santa Fe Springs, CA
DUROCK™ Next Gen panels	0	15%				
FIBEROCK® sheathing, AR panels & underlayment	0	95%	Pass	Low	53	85% FGD Gypsum from Westmoreland, PA; 10% Cardboard Waste(Local)& 2% Wax (Local): manufactured at Gypsum, OH
SECUROCK® roof panels	0	95%	Pass	Low	53	85% FGD Gypsum from Westmoreland, PA; 10% Cardboard Waste(Local) & 2% Wax (Local): manufactured at Gypsum, OH
SECUROCK® exterior sheathing (94% gypsum, 4% glass fiber & 1% starch)	0	0	Pass	Low	48	Manufactured at Empire, NV; Gypsum onsite
	0	0	Pass	Low	48	Manufactured at Sperry, IA; Gypsum onsite
	0	0	Pass	Low	48	Manufactured at Sweetwater, TX; Gypsum on site
SHEETROCK® Wall & Ceiling Texture Tuf Tex	0	0	Pass	Low - 0 g/L		70% Limestone; 10% Mica; 10% Clay; 5% Starch – Manufactured at Dallis, TX

# Sustainability Tables



USGBC LEED Credits	MR 4			EQ 4	MR 5
CONVENTIONAL PLASTER PRODUCTS: (Mixed on Job Site)	Post-Consumer	Pre-Consumer	Approx. Density lbs./cu.ft.	VOC	Plant Location; Raw Materials (%s by weight) Values based on average during:2009 January through December
RED TOP GYPSUM PLASTER	0	0	80	NA	100% Plaster of Paris from Gypsum onsite; Manufactured at Empire, NV
	0	0		NA	100% Plaster of Paris from Gypsum onsite; Manufactured at Shoals, IN
	0	99		NA	100% Plaster of Paris from FGD Gypsum at Westmoreland, PA; Manufactured at Gypsum, OH
RED TOP GAUGING PLASTER	0	0	80	NA	100% Plaster of Paris from Gypsum onsite; Manufactured at Empire, NV
	0	0		NA	100% Plaster of Paris from Gypsum onsite; Manufactured at Southard, OK
	0	0		NA	100% Plaster of Paris from Gypsum onsite; Manufactured at Shoals, IN
RED TOP GAUGING PLASTER - AGGREGATED	0	0	70	NA	98% Plaster of Paris from Gypsum at Nova Scotia, Canada & 2% Perlite; Manufactured at Baltimore, MD
RED TOP WOOD-FIBER PLASTER	0	99	80	NA	99% Plaster of Paris from FGD Gypsum at Westmoreland, PA & 1%Wood; Manufactured at Gypsum, OH
	0	0		NA	99% Plaster of Paris from Gypsum onsite &1% Wood; Manufactured at Shoals, IN
RED TOP FINISH PLASTER	0	0	55	NA	50% Plaster of Paris from Gypsum onsite &50% Lime; Manufactured at Empire, NV
	0	0		NA	50% Plaster of Paris from Gypsum onsite & 50% Lime; Manufactured at Shoals, IN
STRUCTO-BASE BASECOAT PLASTER	0	0	80	NA	100% Plaster of Paris from Gypsum onsite; Manufactured at Empire, NV
	0	0		NA	100% Plaster of Paris from Gypsum onsite; Manufactured at Southard, OK
	0	0		NA	100% Plaster of Paris from Gypsum onsite; Manufactured at Fort Dodge, IA
STRUCTO-LITE BASECOAT PLASTER	0	0	55	NA	90% Plaster of Paris from Gypsum onsite & 10%,Perlite; Manufactured at Empire, NV
	0	0		NA	90% Plaster of Paris from Gypsum onsite &10% Perlite; Manufactured at Shoals, IN
	0	75		NA	90% Plaster of Paris from Gypsum at Westmoreland, PA &10% Perlite; Manufactured at Gypsum, OH
STRUCTO-GAUGE GAUGING PLASTER	0	0	80	NA	100% Plaster of Paris from Gypsum onsite; Manufactured at Fort Dodge, IA
	0	0		NA	100% Plaster of Paris from Gypsum onsite; Manufactured at Southard, OK
KEENES CEMENT	0	0		NA	100% Calcium Sulfate from Gypsum onsite; Manufactured at Southard, OK

# Sustainability Tables



USGBC LEED Credits	MR 4.1 & 4.2			EQ 4	MR 5.2
VENEER PLASTER PRODUCTS: (Mixed on Job Site)	Post-Consumer	Pre-Consumer	Approx. Density lbs./cu.ft.	VOC	Plant Location; Raw Materials (%s by weight) Values based on average during:2009 January through December
DIAMOND VENEER BASECOAT PLASTER	0	0	120	NA	50% Plaster of Paris from Gypsum on-site & 50% Sand; Manufactured at Empire, NV
	0	0		NA	50% Plaster of Paris from Gypsum on-site & 50% Sand; Manufactured at Shoals, IN
DIAMOND VENEER FINISH PLASTER	0	0	70	NA	80% Plaster of Paris from Gypsum onsite & 20% Lime; Manufactured at Empire, NV
	0	0		NA	80% Plaster of Paris from Gypsum onsite & 20% Lime; Manufactured at Shoals, IN
Imperial Veneer Basecoat Plaster	0	0	120	NA	50% Plaster of Paris from Gypsum onsite & 50% Sand; Manufactured at Empire, NV
	0	0		NA	50% Plaster of Paris from Gypsum onsite & 50% Sand; Manufactured at Shoals, IN
IMPERIAL VENEER FINISH PLASTER	0	0	120	NA	75% Plaster of Paris from Gypsum onsite & 25% Sand; Manufactured at Empire, NV
	0	0		NA	75% Plaster of Paris from Gypsum onsite & 25% Sand; Manufactured at Shoals, IN
Plaster Bonder	0	0		45g/L	Water (50%) & Polymer Emulsion; manufactured in Gypsum, OH.
Ivory Finish Lime	0	0		NA	100% Lime manufactured in Genoa, OH, from Limestone on-site.

USGBC LEED Credits	MR 4.1 & 4.2			EQ 4	MR 5.2
LEVELROCK® Floor Underlayment Products: (Mixed on Job Site)	Post-Consumer	Pre-Consumer	Approx. Density lbs./cu.ft.	VOC	Plant Location; Raw Materials (%s by weight) Values based on average during:2009 January through December
LEVELROCK® 2500 Green, 3500 Green, RH Green (Radiant Heat), Commercial RH Green (Radiant Heat), and LEVELROCK® CSD® Green floor underlayment	0	90	115 - 120	NA	Gypsum, OH; 90% FGD Gypsum from Westmoreland, PA; 10% Portland Cement obtained locally.
LEVELROCK® 2500, 3500, 4500, RH (Radiant Heat), Commercial RH (Radiant Heat), CSD® (corrugated steel deck), & CSD® RH floor underlayment	0	0	115 - 120	NA	Southard, OK; Plaster of Paris onsite
	0	0		NA	Fort Dodge, IA; Plaster of Paris onsite
	0	15		NA	Baltimore, MA; Plaster of Paris from Nova Scotia, Canada
LEVELROCK® CSD™ floor underlayment (corrugated steel deck)	0	15	120	NA	Baltimore, MA; Plaster of Paris from Nova Scotia, Canada
	0	0		NA	Southard, OK; Plaster of Paris onsite
LEVELROCK® PROFLOW™, QUIK-TOP™, 2500 Pre-Sanded, 3500 Pre-Sanded, 4500 Pre-Sanded, RH Pre-Sanded, Commercial RH Pre-Sanded floor underlayment	0	0	115-130	NA	Southard, OK; 20% Plaster of Paris onsite, 20% Portland Cement obtained Locally, & 55% Sand obtained locally.
LEVELROCK® CSD® EE (Early Exposure) floor underlayment	0	0	115 - 120	NA	Southard, OK; 90% Gypsum on site; 10% Portland Cement.

Note: USG uses more recaptured (FGD or flue gas desulfurization) gypsum than any other competitive supplier, over 3 million tons in 2003. However, this content changes from plant to plant and even day to day due to availability. The recycled contents provided in these tables are approximate based on plant averages. Most of the power plants, which produce this industrial process material (FGD Gypsum), are east of the Mississippi River. While this industrial process material gypsum is not available everywhere in North America, we do have plants strategically located to meet your needs. Evaluation should be made per job on the benefits of the use of this material over natural gypsum in the production of LEVELROCK® underlayment used in your project. Using locally produced products like LEVELROCK® underlayment may be more environmentally friendly than shipping LEVELROCK® green floor underlayment across the country to take advantage of the high recycled content.

# Sustainability Tables



USGBC LEED Credits	MR 4.1 & 4.2			EQ 4	MR 5.2
LEVELROCK® Floor Underlayment Products:	Post-Consumer	Pre-Consumer	Approx. Density lbs./cu.ft.	VOC	Plant Location; Raw Materials (%s by weight) Values based on average during:2009 January through December
LEVELROCK® SAM N25, N40 & N75 Sound Mats	0	40			
LEVELROCK® SRM-25 Sound Mats	0	50			
LEVELROCK® SRB Sound Board	17	32.7			

USGBC LEED Credits	MR 4.1 & 4.2			EQ 4	MR 5.2
ARCHITECTURAL GYPSUM PLASTER AND CEMENT PRODUCTS: (Mixed on Job Site)	Post-Consumer	Pre-Consumer	Approx. Density lbs./cu.ft.	VOC	Plant Location; Raw Materials (%s by weight) Values based on average during:2009 January through December
HYDROCAL® WHITE, FGR 95 AND FGR 115 gypsum cement	0	0	103-112	NA	Plaster of Paris from Gypsum onsite; Manufactured at Southard, OK
ENDURACAST™ Gypsum Matrix gypsum cement	0	0	130	NA	80% Plaster of Paris from Gypsum onsite; Manufactured at Southard, OK
ULTRACAL® 30 AND 60, gypsum cement	0	0	120	NA	85% Plaster of Paris from Gypsum onsite & 10% Portland Cement obtained locally; Manufactured at Southard, OK
ARCHITECTURAL HYDROCAL®, gypsum cement	0	0	95-104	NA	Plaster of Paris from Gypsum onsite; Manufactured at Fort Dodge, IA

USGBC LEED Credits	MR 4.1 & 4.2			EQ 4	MR 5.2
FORTACRETE STRUCTURAL PANELS:	Post-Consumer	Pre-Consumer	Approx. Density lbs./cu.ft.	VOC	Plant Location; Raw Materials (%s by weight) Values based on average during:2009 January through December
FORTACRETE FLOOR DECKING	0	36	78		36% Fly Ash, 20% Gypsum from Fort Dodge, IA, 20% Portland Cement, 10% Sand, & 10% Fibrous Glass; manufactured in Delavan, WI

USGBC LEED Credits	MR 4.1 & 4.2			EQ 4	MR 5.2
USG INDUSTRIAL/ENVIRONMENTAL PRODUCTS:	Post-Consumer	Pre-Consumer	Approx. Density lbs./cu.ft.	VOC	Plant Location; Raw Materials (%s by weight) Values based on average during:2009 January through December
ENVIRO-SHIELD BFM	21%	0%			30% Gypsum (Southard, OK), 49% Wood Fiber, 21% Recycled Paper; manufactured at Tyler, TX
ENVIRO-SHIELD PLUS	0%	0%			30% Gypsum (Southard, OK), 70% Wood Fiber; manufactured at Tyler, TX

For more information on the benefits of the above products visit [www.usg-erosioncontrol.com/environmental/index.asp](http://www.usg-erosioncontrol.com/environmental/index.asp) or review the case studies at [www.lanandwater.com](http://www.lanandwater.com).

# Sustainability Tables



1/2" SHEETROCK® Gypsum Panels:							Values based on average during:2009 January through December
USG Manufacturing Locations:	Post-Cons	Pre-Cons	Recycle Content	Weighted Rec. Con.	Rapid Renew	EQ 4 CHPS	Product Raw materials and Sources: Based on above values rounded down to the first decimal place.
Aliquippa, PA	5.3%	92.1%	97.4%	51.4%	0.4%	Pass/Low	Gypsum: (FGD:) 92.1% from Pleasants, WV Paper: 5.3% (Face) from Otsego, MI and (Back) from Oakfield, NY
Baltimore, MD	5.7%	21.6%	27.3%	16.5%	0.5%	Pass/Low	Gypsum: (FGD:) 21.7% from York, PA (Natural) 68.7% from Nova Scotia, Canada Paper: 5.7% (Face) from Galena Park, TX and (Back) from Galena Park, TX
Bridgeport, AL	5.5%	93.1%	98.6%	52.1%	0.4%	Pass/Low	Gypsum: (FGD:) 93.2% from Bartow, GA Paper: 5.5% (Face) from Clark, NJ and (Back) from Clark, NJ
East Chicago, IN	5.3%	90.9%	96.2%	50.8%	0.1%	Pass/Low	Gypsum: (FGD:) 90.9% from Porter, IN Paper: 5.3% (Face) from Otsego, MI and (Back) from Otsego, MI
Empire, NV	5.0%	0.0%	5.0%	5.0%	0.6%	Pass/Low	Gypsum: (Natural) 95.4% from Empire, NV Paper: 5.0% (Face) from Otsego, MI and (Back) from Otsego, MI
Galena Park, TX	5.4%	93.2%	98.6%	52.0%	0.3%	Pass/Low	Gypsum: (FGD:) 93.3% from Harris, TX Paper: 5.4% (Face) from Galena Park, TX and (Back) from Galena Park, TX
Hagersville, ON, Canada	4.8%	21.2%	26.1%	15.5%	0.4%	Pass/Low	Gypsum: (FGD:) 21.2% from Tompkins, NY (Natural) 77.1% from On Site Paper: 4.8% (Face) from Otsego, MI and (Back) from Oakfield, NY
Jacksonville, FL	4.9%	29.9%	34.8%	19.9%	0.3%	Pass/Low	Gypsum: (FGD:) 29.9% from Duval, FL (Natural) 61.6% from Nova Scotia, Canada Paper: 4.9% (Face) from Otsego, MI and (Back) from Otsego, MI
Montreal Quebec, Canada	5.0%	94.6%	99.6%	52.3%	0.4%	Pass/Low	Gypsum: (FGD:) 94.6% from New Brunswick, Canada Paper: 5.0% (Face) from Otsego, MI and (Back) from Oakfield, NY
Norfolk, VA	5.1%	93.1%	98.2%	51.7%	0.4%	Pass/Low	Gypsum: (FGD:) 93.2% from Chesterfield, VA Paper: 5.1% (Face) from Otsego, MI and (Back) from Oakfield, NY
Plaster City, CA	4.9%	0.0%	4.9%	4.9%	0.4%	Pass/Low	Gypsum: (Natural) 88.1% from On Site Paper: 4.9% (Face) from Otsego, MI and (Back) from Otsego, MI
Rainier, OR	4.8%	0.0%	4.8%	4.8%	0.3%	Pass/Low	Gypsum: (Natural) 94.1% from Mexico Paper: 4.8% (Face) from Otsego, MI and (Back) from Otsego, MI
Shoals, IN	4.7%	37.7%	42.4%	23.6%	0.4%	Pass/Low	Gypsum: (FGD:) 37.8% from Pike, IN (Natural) 56.7% from On Site Paper: 4.7% (Face) from Otsego, MI and (Back) from Otsego, MI
Sigard, UT	5.5%	0.0%	5.5%	5.5%	0.2%	Pass/Low	Gypsum: (Natural) 94.8% from On Site Paper: 5.5% (Face) from North Kansas City, MO and (Back) from North Kansas City, MO
Southard, OK	5.8%	0.0%	5.8%	5.8%	0.4%	Pass/Low	Gypsum: (Natural) 88.0% from On Site Paper: 5.8% (Face) from North Kansas City, MO and (Back) from North Kansas City, MO
Sperry, IA	6.3%	1.0%	7.3%	6.8%	0.4%	Pass/Low	Gypsum: (FGD:) 1.0% from Muscatine, IA (Natural) 91.1% from On Site Paper: 6.3% (Face) from Otsego, MI and (Back) from Otsego, MI
Stony Point, NY	5.6%	4.6%	10.2%	7.9%	0.8%	Pass/Low	Gypsum: (FGD:) 4.7% from Montour, PA (Natural) 83.3% from Nova Scotia, Canada Paper: 5.6% (Face) from Clark, NJ and (Back) from Clark, NJ
Sweetwater, TX	6.0%	0.0%	6.0%	6.0%	0.4%	Pass/Low	Gypsum: (Natural) 92.0% from On Site Paper: 6.0% (Face) from Galena Park, TX and (Back) from North Kansas City, MO
Washingtonville, PA	5.3%	92.9%	98.2%	51.8%	0.5%	Pass/Low	Gypsum: (FGD:) 93.0% from Montour, PA Paper: 5.3% (Face) from Otsego, MI and (Back) from Oakfield, NY
AWL - St. John, New Brunswick, Canada	4.9%	89.1%	94.0%	49.5%	0.3%	Pass/Low	Gypsum: (FGD:) 89.1% from Belledune, New Brunswick, Canada Paper: 4.9% (Face) from Otsego, MI and (Back) from Oakfield, NY

# Sustainability Tables



**5/8" SHEETROCK® FIRECODE Gypsum Panels:** Values based on average during:2009 January through December

USG Manufacturing Locations:	Post-Cons	Pre-Cons	Recycle Content	Weighted Recycle Content	Rapid Renew	EQ 4 CHPS	Product Raw materials and Sources: Based on above values rounded down to the first decimal place.
Aliquippa, PA	3.4%	94.1%	97.5%	50.5%	0.2%	Pass/Low	Gypsum: (FGD:) 94.2% from Pleasants, WV Paper: 3.4% (Face) from Otsego, MI and (Back) from Oakfield, NY
Baltimore, MD	3.7%	22.9%	26.6%	15.2%	0.3%	Pass/Low	Gypsum: (FGD:) 22.9% from York, PA (Natural) 72.6% from Nova Scotia, Canada Paper: 3.7% (Face) from Galena Park, TX and (Back) from Galena Park, TX
Bridgeport, AL	3.5%	94.2%	97.5%	50.6%	0.3%	Pass/Low	Gypsum: (FGD:) 94.3% from Bartow, GA Paper: 3.5% (Face) from Clark, NJ and (Back) from Clark, NJ
East Chicago, IN	3.3%	96.4%	97.5%	51.5%	0.1%	Pass/Low	Gypsum: (FGD:) 96.4% from Porter, IN Paper: 3.3% (Face) from Otsego, MI and (Back) from Otsego, MI
Empire, NV	3.5%	0.0%	3.5%	3.5%	0.2%	Pass/Low	Gypsum: (Natural) 96.3% from Empire, NV Paper: 3.5% (Face) from Otsego, MI and (Back) from Otsego, MI
Galena Park, TX	3.7%	94.2%	97.9%	50.8%	0.2%	Pass/Low	Gypsum: (FGD:) 94.2% from Harris, TX Paper: 3.7% (Face) from Galena Park, TX and (Back) from Galena Park, TX
Hagersville, ON, Canada	3.4%	21.1%	24.5%	14.0%	0.3%	Pass/Low	Gypsum: (FGD:) 21.1% from Tompkins, NY (Natural) 76.4% from On Site Paper: 3.4% (Face) from Otsego, MI and (Back) from Oakfield, NY
Jacksonville, FL	3.4%	31.2%	34.6%	19.0%	0.2%	Pass/Low	Gypsum: (FGD:) 31.2% from Duval, FL (Natural) 64.2% from Nova Scotia, Canada Paper: 3.3% (Face) from Otsego, MI and (Back) from Otsego, MI
Montreal Quebec, Canada	3.4%	93.7%	97.1%	50.3%	0.2%	Pass/Low	Gypsum: (FGD:) 93.7% from New Brunswick, Canada Paper: 3.5% (Face) from Otsego, MI and (Back) from Oakfield, NY
Norfolk, VA	3.5%	90.4%	93.9%	48.7%	0.3%	Pass/Low	Gypsum: (FGD:) 90.4% from Chesterfield, VA Paper: 3.5% (Face) from Otsego, MI and (Back) from Oakfield, NY
Plaster City, CA	3.3%	0.0%	3.3%	3.3%	0.3%	Pass/Low	Gypsum: (Natural) 93.3% from On Site Paper: 3.3% (Face) from Otsego, MI and (Back) from Otsego, MI
Rainier, OR	3.3%	0.0%	3.3%	3.3%	0.3%	Pass/Low	Gypsum: (Natural) 97.1% from Mexico Paper: 3.3% (Face) from Otsego, MI and (Back) from Otsego, MI
Shoals, IN	3.3%	37.4%	40.7%	22.0%	0.2%	Pass/Low	Gypsum: (FGD:) 37.5% from Pike, IN (Natural) 56.2% from On Site Paper: 3.3% (Face) from Otsego, MI and (Back) from Otsego, MI
Sigard, UT	4.0%	0.0%	4.0%	4.0%	0.2%	Pass/Low	Gypsum: (Natural) 96.6% from On Site Paper: 4.0% (Face) from North Kansas City, MO and (Back) from North Kansas City, MO
Southard, OK	3.7%	0.0%	3.7%	3.7%	0.3%	Pass/Low	Gypsum: (Natural) 90.3% from On Site Paper: 3.7% (Face) from North Kansas City, MO and (Back) from North Kansas City, MO
Sperry, IA	3.4%	1.0%	4.4%	3.9%	0.4%	Pass/Low	Gypsum: (FGD:) 1.0% from Muscatine, IA (Natural) 94.9% from On Site Paper: 3.4% (Face) from Otsego, MI and (Back) from Otsego, MI
Stony Point, NY	3.6%	4.7%	8.3%	6.0%	0.3%	Pass/Low	Gypsum: (FGD:) 4.8% from Montour, PA (Natural) 85.5% from Nova Scotia, Canada Paper: 3.6% (Face) from Clark, NJ and (Back) from Clark, NJ
Sweetwater, TX	4.0%	0.0%	4.0%	4.0%	0.4%	Pass/Low	Gypsum: (Natural) 96.7% from On Site Paper: 4.0% (Face) from Galena Park, TX and (Back) from North Kansas City, MO
Washingtonville, PA	3.4%	94.8%	98.2%	50.8%	0.3%	Pass/Low	Gypsum: (FGD:) 94.8% from Montour, PA Paper: 3.4% (Face) from Otsego, MI and (Back) from Oakfield, NY
AWL - St. John, New Brunswick, Canada	3.4%	90.5%	93.9%	48.7%	0.2%	Pass/Low	Gypsum: (FGD:) 90.5% from Belledune, New Brunswick, Canada Paper: 3.4% (Face) from Otsego, MI and (Back) from Oakfield, NY

# Sustainability Tables



Related USGBC LEED for Schools Credits		MR 4.1 & 4.2				EQ 8	EQ Pre 3 & EQ 9			EQ 3.2 & EQ 4		MR 6	MR 5.1/5.2 & EQ 10	
Product Family: Acoustical Panels & Tiles		Post-Consumer		Pre-Consumer		LR	NRC	CAC	Approx. Density lbs/cu.ft.	CHPS	Formaldehyde & VOC Emissions	Rapid Renew	Raw Materials/Comments (percentage by weight) Values based on average during:2009 January through December	
		Class A	FC	Class A	FC									
'X'-technology - Cloquet, MN	ASTRO™ CLIMAPLUS™ (Illusion)	0%	0%	65%	68%	.86	.50/.55	35	18-21	Pass	Low	3.5%	'X'-technology manufactured at Cloquet, MN Mineral Wool(Pre-consumer%) from Red Wing, MN; 5% Polymer Emulsion (local), Starch (Rapid Renew %) FC panels contain 20% Clay	
	ECLIPSE™ CLIMAPLUS™ (Illusion)	0%	0%	77%	62%	.86	.65/.70	35	17			1-3%		
	MILLENNIA™ CLIMAPLUS™ (Illusion) & High NRC	0%	0%	75%	61%	.87	.70/.75	35	17			1-3.5%		
	MARS™ CLIMAPLUS™	0%	NA	75.2%	NA	.89	.70	35	17			3%		
	MARS™ CLIMAPLUS™ High NRC	0%	NA	77%	NA	.89	.80	35	17			3%		
Cast products - Walworth, WI	BRIO™ CLIMAPLUS™	0%	NA	71%	NA	.81	.70	35	22	Pass/ Zero	Zero	12.5%	Cast products manufactured at Walworth, WI Mineral Wool(Pre-consumer %) made onsite, Starch (rapid Renew %) Class A panels 10% Plaster of Paris from East Chicago, IN, FC panels 14% Clay	
	"F" FISSURED™	0%	NA	71%	NA	.79	.70	35	23			12.5%		
	FRESCO™ CLIMAPLUS™	0%	NA	71%	NA	.83	.70	35	22			12.5%		
	FROST™, FROST™ CLIMAPLUS™	0%	0%	71%	71%	.85	.70	36/40	22			12.5%		
	FROST™ CLIMAPLUS™ Hi-NRC	0%	0%	71%	71%	.85	.75	38/40	22			12.5%		
	GLACIER™	0%	0%	71%	71%	.70	.65	35	20			12.5%		
	SANDRIFT™ CLIMAPLUS™	0%	0%	71%	71%	.83	.70	38	20			12.5%		
	SUMMIT™ CLIMAPLUS™	0%	NA	61%	NA	.81	.70	38/40	24			11%		
WetFelt Products - Greenville, MS	OLYMPIA™ MICRO CLIMAPLUS™ (Illusion)	13%	NA	39%	NA	.87	.50	30/35	18	Pass	Low	8%	WetFelt Products manufactured at Greenville, MS Mineral Wool(Pre-consumer %) railed from Red Wing, MN; Perlite 20-50%; Recycled Paper (Post-consumer %); Starch (Rapid Renew %); and Clay 2-12%	
	ASPEN™ (Illusion)	16%	NA	27.3%	NA	.87	.52/.55	35/40	18-22			8.2%		
	PEBBLED™ CLIMAPLUS™	15.4%	NA	26.9%	NA	.86	.55	35	14			8.1%		
	ROCK FACE™ CLIMAPLUS™	NA	6%	NA	43%	.86	.55	35	24			7%		
	TOUCHSTONE™ CLIMAPLUS™	NA	6%	NA	42.4%	.86	.55	35	26			7%		
	RADAR™ CLIMAPLUS™ (Illusion)	17.2%	6%	13%	42.3%	.84	.55	33/35	13-14			7%		
	FISSURED™	17%	6%	8%	42.4%	.81	.55	33/35	12-20			7%		
	RADAR™ (Illusion)	17%	6%	8%	42.4%	.84-.85	.55/.60	33/35	13-14			7%		



# Sustainability Tables



Related USGBC LEED for Schools Credits		MR 4.1 & 4.2				EQ 8	EQ Pre 3 & EQ 9			EQ 3.2 & EQ 4		MR 6	MR 5.1/5.2 & EQ 10
Product Family: Acoustical Panels & Tiles		Post-Consumer		Pre-Consumer		LR	NRC	CAC	Approx. Density lbs/cu.ft.	CHPS	Formaldehyde & VOC Emissions	Rapid Renew	Raw Materials/Comments (percentage by weight) Values based on average during 2009 January through December
		Class A	FC	Class A	FC								
Wet felt products - Cloquet, MN	RADAR™ CLIMAPLUS™ (Illusion)	18.43%	6%	12.8%	44%	.84	.55	33/35	13-14	Pass	Low	6-8%	Wet felt products manufactured at Cloquet, MN;  Mineral Wool(Pre-consumer %) from Red Wing, MN, Perlite 20-50%; Recycled Paper (Post-consumer %) local; Starch (Rapid Renew %); Clay 2-12%
	FISSURED™	17.3%	6%	7%	44%	.81	.50/.55	33/35	12-20			6-7%	
	RADAR™	17.3%	5.6%	7.4%	43/7%	.85	.50/.55	33/40	12-20			6-7%	
	RADAR™ CLIMAPLUS™ High CAC/NRC	NA	1%	NA	56.2%	.84	.55/.70	40/35	18			10%	
	CLEAN ROOM™ CLIMAPLUS™	NA	6%	NA	45%	.79	.55	35	21	No	Meets state of Washington	6%	
	RADAR™ Ceramic CLIMAPLUS™	NA	0%	NA	44.2%	.82	.50	40	26	Pass/Zero	Zero	0%	

Related USGBC LEED for Schools Credits		MR 4.1 & 4.2				EQ 8	EQ Pre 3 & EQ 9			EQ 3.2 & EQ 4		MR 6	MR 5.1/5.2 & EQ 10
Product Family: Specialty Panels & Tiles		Post-Consumer		Pre-Consumer		LR	NRC	CAC	Approx. Density lbs/cu.ft.	CHPS	Formaldehyde & VOC Emissions	Rapid Renew	Raw Materials/Comments (%s by weight) Values based on average during 2009 January through December
		Class A	FC	Class A	FC								
PREMIER HI-LITE™ CLIMAPLUS™		8.9%	NA	26.7%	NA	.76	.60/.75	20	28	No	Meets state of Washington	0%	Glass Fiber Products Manufactured at Greenville, MS 90% Glass Fiber base mat; 9% Glass Fiber facing
HALCYON™ CLIMAPLUS™ (varies w/ thickness and backing)		39%	NA	1%	NA	.88	.90/1.00	20/30	6			0%	
PREMIER NUBBY™ CLIMAPLUS™ (varies w/ thickness and backing)		29%	NA	0%	NA	.87	.85/.90	25	6			0%	
SHEETROCK™ lay-in ceiling panel CLIMAPLUS™		NA	***	NA	***	.77	—	35/40	48	No	Meets state of Washington	1%	Gypsum Panel and Vinyl product manufactured at Shoals, IN (Gypsum Panels onsite); Sweetwater, TX (Gypsum Panels onsite); Stony Point, NY (Gypsum Panels onsite); and Plaster City, CA (Gypsum Panel onsite)
SHEETROCK™ lay-in CLEAN ROOM		NA	***	NA	***	.77	—	40	48	No	Meets state of Washington	1%	Gypsum Panel and Vinyl product manufactured at Sweetwater, TX (Gypsum Panel onsite)

# Sustainability Tables



USGBC LEED Credits	MR 4		EQ 8	MR 5
Product Family: Specialty Panels & Grid	Post-Cons	Pre-Consumer	NRC	Raw Materials/Comments (%s by weight) Values based on average during:2009 January through December
Billo	0%	0%	N/A	US produced virgin polycarbonate raw material, manufactured in Franklin, WI
Cadre & Quadra	0%	0%	N/A	Tijuana, MX
Celebration steel suspension System	0%	25%	N/A	US and foreign steel, manufactured in Westlake, OH
Celebration aluminum panels	68%	22%	Up to .65 with A116 perf.	US aluminum, manufactured in Oakville, ON
C <sup>2</sup> Paired Compasso, steel	0%	25%	N/A	US and foreign steel, manufactured in Westlake, OH
Compasso (2 ¼", 4", 6" and 8" painted steel)	0%	25%	N/A	US and foreign steel, manufactured in Westlake, OH
Compasso (10" and 12" painted aluminum)	68%	22%	N/A	US aluminum, manufactured in Oakville, ON
Compasso Slim, aluminum	0%	0%	N/A	Virgin aluminum, manufactured in City of Industry, CA
Curvatura steel suspension system and trim	0%	25%	N/A	US and foreign steel, manufactured in Westlake, OH
Curvatura aluminum panels	68%	22%	N/A	US aluminum, manufactured in Oakville, ON
Curvatura Diamondflex steel panels	0%	25%	N/A	US and foreign steel, manufactured in Vernon Hills, IL
Curvatura Lexan® panels	0%	0%	N/A	Coburg, ON
Geometrix aluminum panels	68%	22%	N/A	US aluminum, manufactured in Oakville, ON
GridWare, steel suspension	0%	25%	N/A	US and foreign steel, manufactured in Westlake, OH
Libretto aluminum panels	68%	22%	N/A	US aluminum, manufactured in Oakville, ON
Libretto profile trim and Suspension, steel	0%	25%	N/A	US and foreign steel, manufactured in Westlake, OH
Panz aluminum panels	68%	22%	Up to .65 with A116 perf.	US aluminum, manufactured in Oakville, ON
Paraline aluminum pans	68%	22%	N/A	US and foreign aluminum, manufactured in Westlake, OH
Topo aluminum suspension	0%	50%	N/A	US aluminum, manufactured in Oakville, ON
Topo Lexan® panels	0%	0%	N/A	US produced virgin polycarbonate raw material, manufactured in Franklin, WI
Transluents, Lexan® panels	0%	0%	N/A	US produced virgin polycarbonate raw material, manufactured in Franklin, WI
Transluents, FRP panels	0%	0%	NA	
Transparencies acrylic panels	0%	0%	N/A	Westlake, OH
WireWorks steel panels	80%	20%	N/A	US and foreign steel, manufactured in Chicago, IL

# Sustainability Tables



Translucents, PETG panels	0%	40%	NA
---------------------------	----	-----	----

The above information is the values for each product from various plant locations average over the year of 2009, content changes from plant to plant and even day to day at any one plant due to availability. USG has taken strict and elaborate steps to publish the most accurate information in the industry. Recycled content is no exception! While gypsum based panels, commonly referred to as Drywall may have many ingredients and are not all alike, all panels have these core ingredients: gypsum, face papers (front and back), starch as a binder, paper fiber in the core, and air. The fire listed products are regulated by weight and their ingredient percentages and would also have glass fibers in the core as an additional base ingredient. The percentage of the ingredients changes very little from manufacture to manufacture, for example the gypsum core of accounts for about 94% of the total by weight, paper (including face, back papers and core fibers) is about 5% with about 0.5% starch for standard ½" panels. Thicker panels will have less paper percentage due to the increase weight and core thickness. Recycled content of any given plant and panel will vary based on raw material source and availabilities. All manufacturers use 100% recycled paper in the production of their face papers. However, this secondary material comes from multiple sources, usually local. There are two main sources for gypsum in the U.S.: Natural – mined material which was laid down in large fields billions of years ago. The largest open field of gypsum in the world is White Sands National Park in New Mexico, it is not a source used for drywall production. The other source is an Industrial Process material; the most common source is from the desulfurization of coal powered electrical plants. The standard process of limestone scrubbing of the stacks on coal-fired power plants produces calcium sulfite, a chemical having little or no use and therefore is discarded. This desulfurization can be modified to produce calcium sulfate, with added cost to the power company. This material can be used by gypsum drywall companies and cement companies. This material is considered to be a post-industrial material and therefore count as most of drywall's recycled content.

USG is committed to provide replicable scientific data supporting our product claims, and is committed to marketing conduct inline with the letter and spirit of the **Federal Trade Commission Environmental Marketing Guides 16 C.F.R. § 260.7(d)**.

## Test Protocols:

Recycled Content (**Post-Consumer & Post-Industrial**) per Federal Trade Commission Environmental Marketing Guides. **Post-Industrial** and **Pre-Consumer** are one in the same under the USGBC LEED Rating systems!

**Weighted Recaptured Gypsum** is the term used to refer to the value defined for LEED MR4.

**LR** (Light Reflectance) tested per ASTM C1477.

**NRC** (Noise Reduction Coefficient) per ASTM C423.

**CAC** (Ceiling Attenuation Class) tested per ASTM 1414.

**TVOC** (Total Volatile Organic Compound) emission measured per ASTM D 5116.

**CHPS** (Collaborative for High Performance Schools) follow EPA Section 01350 for VOC's emission.

**Formaldehyde** emissions measured during CHPS testing per Section 01350, for most products CHPS allows 13.5 ppb.

**Zero emissions** is defined as the quantity less than test chamber background concentrations as required by Section 3.8.4.2 of the "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale

Environmental Chambers, Supercedes previous versions of small-scale environmental chamber testing portion of California Specification 01350, July 15, 2004." Section 3.8.4.3 states "Background concentrations in the empty chamber ventilated at 1.0 air changes per hour shall not exceed 2 µg m<sup>-3</sup> for any individual VOC, and 25 µg m<sup>-3</sup> for TVOC.

**For the latest information on LEED Rating Systems visit [www.usgbc.org](http://www.usgbc.org) or your LEED Rating System Reference Guide.**

**LEED related Credits MR4 – Recycled Content:** (Post-consumer Percentage + ½ Pre-consumer Percentage) \* product cost.

**LEED related Credits MR5 – Regional Materials:** extracted, harvested or recovered, as well as manufactured, within 500 miles of the project site. For products like plaster that are mixed on site with other materials like sand, lime and water; each material within 500 miles (as-the-crow-flies: calculated along the assumed spherical earth's surface) of the project can be counted for this credit.

**LEED related Credits MR6 – Rapidly Renewing Content:** products made from materials with a ten year or less growth cycle. For products made of multiple raw materials the fraction of the assembly that is considered rapidly renewable is determined by weight. That fraction is then applied to the material's cost to determine the rapidly renewable materials cost for that assembly.

**LEED related Prerequisite EQ3 (Schools ONLY) – Minimum Acoustical Performance:** sound-absorptive finishes for compliance with reverberation times requirements as specified in ANSI Standard S12.60-2002.

**LEED related Credits MR3.2 (NC, Schools & CI ONLY) – IAQ Management Plan:** Reduce emission and absorption during construction.

**LEED related Prerequisite EQ4 - Low-Emitting Materials:** content various based on product group or emissions meeting CHPS.

**LEED related Prerequisite EQ8 – Daylighting & Views:** increased daylighting & views from deeper interior spaces.

**LEED related Prerequisite EQ9 (Schools ONLY) – Enhanced Acoustical Performance:** design the building shell, classroom partitions and other partitions to meet the Sound Transmission Class (STC) requirement of at least 35. AND Background Noise: reduce level to 40 dBA or less from HVAC.

**For the latest information on USG products and Sustainability visit [USG Design Studio: http://www.usgdesignstudio.com/leed.asp](http://www.usgdesignstudio.com/leed.asp)**

## Trademarks

The following are trademarks of USG Corporation or a related company: ASPEN, ASTRO, BRIO, CLEAN ROOM, *CLIMAPLUS*, DUROCK, ECLIPSE, FIBEROCK, "F" FISSURED, FISSURED, FRESCO, FROST, GLACIER, HALCYON, MARS, MICORE, MILLENNIA, OLYMPIA MICRO, PEBBLED, PREMIER HI-LITE, PREMIER NUBBY, RADAR, RED TOP, ROCK FACE, SANDRIFT, SHEETROCK, SUMMIT, TOUCHSTONE, TUFF-HIDE. LEED is a registered trademark of the U.S. Green Building Council.