Materials and Fabrication Overview

1. Materials

- 1. Core Materials
 - SkyBlend Particle Board Up to 1-1/8" Thick: Industrial Grade 47lb density, Grade M2. SCS Certified for being 100% Pre-Consumer recycled content. Contributes toward LEED Credits EQ4.4 (No added urea-formaldehyde), MR4.1 and MR4.2 for its recycled content.
 - 2. Medex Medium Density Fiberboard (MDF) Up to 3/4" Thick: Industrial Grade 48lb density. SCS Certified for 100% Pre-consumer recycled content. FSC certified panels available. Contributes toward LEED Credits EQ4.4 (No added urea-formaldehyde), MR4.1 and MR4.2 (recycled content), MR7 (FSC Certified Wood Product).
- 2. Interior Finish Materials
 - 1. Thermally Fused Melamine Laminate
 - 2. High Pressure Laminate (VGP)
 - 3. Gator-Ply Enviro Backer (Applied to Underside of Counter Tops)
- 3. Exterior Finish Materials
 - 1. High Pressure Laminate (VGP)
 - 2. High Pressure Laminate (HGS)
- 4. Edging Materials
 - 1. Cabinet, Door & Drawer Edges Color Selections by others
 - 1. 0.018" Color Through PVC Applied to Exposed Edges of Cabinet Bodies & Shelves
 - 2. 3mm Color Through PVC Applied to Edges of Doors and Drawer Fronts
 - 3. High Pressure Laminate (VGP) Applied to edges, Face Applied Last
 - 2. Counter Top Edges Color Selections by others
 - 1. 3mm Color Through PVC
 - 2. Rubber/Vinyl T-Molding
 - 3. Hardwood Stained/Finished
 - 4. High Pressure Laminate (HGS) Edge on First

5. Adhesives

- Thermopastic Adhesive (Hot Melt): Jowatherm 288.60 Ethylene-Vinyl Acetate (EVA). Contributes to LEED Credit EQ4.1 (Low Emitting VOC's) Meets or exceeds Requirements of SCAQMD Rule #1168.
- Contact Adhesive: 3M Scotch-Weld 94 CA. Contributes to LEED Credit EQ4.1 (Low Emitting VOC's), GREENGUARD Certified, Meets or exceeds Requirements of SCAQMD Rule #1168.
- 3. Crosslink PolyVinyl Acetate (PVA): XL-714 Contributes to LEED Credit EQ4.1 (Low Emitting VOC's) Meets or exceeds Requirements of SCAQMD Rule #1168.
- 4. Crosslink PolyVinyl Acetate (PVA): Titebond II Premium Wood Glue. Contributes to LEED Credit EQ4.1 (Low Emitting VOC's) Meets or exceeds Requirements of SCAQMD Rule #1168.

2. Fabrication

- 1. Cabinets, Counter Tops, and all other related millwork will be built to specifications provided by contractor or architect.
- 2. Counter Top Construction
 - 1. 1-1/4" thick top will consist of 1-1/8" particle board core (detail 1.1.1), high pressure laminate (HGS) on top surface, balanced with backer on bottom facing surface. Exposed edges to receive 3mm PVC, T-Mold, Hardwood or HPL.
 - 2. 1-1/2" thick top consist of a 3/4" particle board core with 3/4" build up on front and back of bottom face. High pressure laminate on top face, balanced with backer on bottom facing surface. Exposed edges to receive 3mm PVC, T-Mold, Hardwood or HPL self-edge.
 - 3. Splashes to be 4" high unless specified otherwise, and will be of the same material as the core of the top they install on. Faces and edges to be high pressure laminate, edges on last.

3. Base and Tall Cabinet Construction

- 1. All Cabinet Parts have a 3/4" particle board core (unless specified otherwise)
- 2. Bottoms and hangar rails are dadoed, glued and screwed to the sides. All intermediate (drawer) rails are also dadoed, glued and screwed to the sides.
 - 1. Rear hangar rail will be 3" deep
 - 2. Front hangar rail and all drawer rails will be 5" deep
 - 3. Sink Base cabinets will use no rear hangar rail, and the front hangar rail will be 7" high (vertically oriented). Steel brackets will be installed in all four corners of the base to provide rigidity. These brackets will also serve to secure the counter top.
- 3. Backs are dadoed, glued and screwed to sides, inset 1/8" from back edge of sides to provide space to scribe cabinet to wall.
 - Cabinets with finished backs will be flush, with the back covered by a single sheet of high pressure laminate (VGP) unless prohibited by grain or pattern of selected laminate.
- 4. Toe bases will be 4" high and integral to the cabinets unless specified otherwise. The cabinets will be installed with this base raw, to be finished after installation by others in accordance with the appropriate specifications.
- 5. Adjustable shelves in widths up to and including 36" to be 3/4" thick, wider than 36" to be 1" thick particle board core. Shelf faces to match interior finish of cabinet. Front edge will be banded with 0.018" PVC to match cabinet interior.

4. Wall Cabinet Construction

- 1. All Cabinet Parts have a 3/4" particle board core (unless specified otherwise)
- 2. Tops and bottoms are dadoed, glued and screwed to the sides.
- 3. Backs are fully captured 3/4" thick panels, inset 1/8" to provide a scribe for installation. Backs are dadoed, glued and screwed to sides, top and bottom.
- 4. Adjustable shelves in widths up to and including 36" to be 3/4" thick, wider than 36" to be 1" thick particle board core. Shelf faces to match interior finish of cabinet. Front edge will be banded with 0.018" PVC to match cabinet interior.

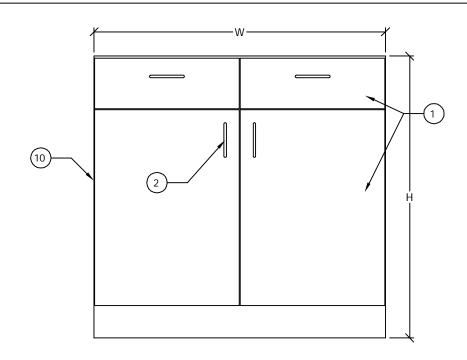
5. Drawer Construction

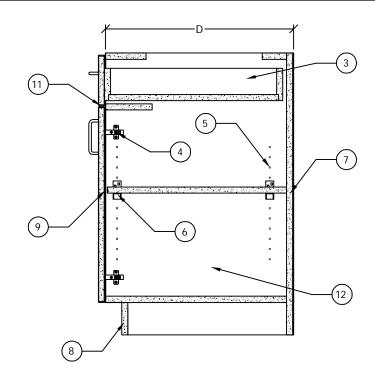
- 1. Drawer boxes to be constructed of 3/4" particle board with thermally fused melamine laminate faces. Drawer box to have front independent of cabinet drawer front. All exposed drawer box edges to be banded with White 0.018" PVC.
- 2. Front and back are hardwood doweled and glued to the sides.

- 3. Bottoms are fully captured and are dadoed, glued and screwed to sides, front and back.
- 4. File drawers are fitted with a rail system for letter or legal sized filing, with cross-rails that can be set for lateral filing.
- 6. Doors/Drawer Fronts
 - 1. All Doors and Drawer fronts will be 3/4" particle board core, with high pressure laminate (VGP) on both sides.
 - 2. All door and drawer front edges will be finished with 3mm Color through PVC (unless specified otherwise).

3. Hardware

- 1. Hinges
 - 1. Concealed
 - 1. 120° Blum full overlay clip-top
 - 2. 120° Blum half-cranked clip top
 - 3. 170° Blum full overlay clip top
 - 2. Institutional
 - 1. 270° 5 Knuckle with Hospital Tips and Non-Removable Pins
 - 3. Quantities
 - 1. Doors Up to 48" in height will have 2 hinges
 - 2. Doors 48" to 72" will have 3 hinges
 - 3. Doors Taller than 72" will have 4 hinges
- 2. Pulls
 - 1. 4" O.C. Metal Wire Pull in Brushed Nickel Finish. Pull complies with ADA Spec #4.1.3.9.
- 3. Drawer Slides
 - 1. Standard, Medium & Pencil Drawers will have Bottom Edge Mounted ¾ Extension Self-Closing White Epoxy Slides with a 100lb Capacity.
 - 2. Large & File drawers will have Bottom Edge Mounted Full Extension Self-Closing White Epoxy Slides with a 150lb Capacity.
- 4. Adjustable Shelf Supports
 - 1. Transparent Plastic Double 5mm Pin Support that Locks both 3/4" and 1" Shelves. Installation and adjustment using 32mm O.C. Lineboring provided on all cabinet Sides.
- 5. Locks CompX Timberline Polished Nickel Finish
 - 1. All Lock Cylinder bodies accept the same Lock Plugs, so many different types of locks can be Master Keyed, or even keyed alike.
 - 2. Double Door Locks on all 2 Door Cabinets, eliminating the need for elbow catches
 - 3. Cam Locks on all Single drawers
 - 4. Gang Locks on drawer banks
- 6. Closet Rod
 - 1. Knape & Vogt 770 or Equivalent Rod in Chrome Finish
 - 2. Knape & Vogt 734 or Equivalent Flange in Chrome Finish
- 7. File Drawer System
 - 1. Letter Timberline FF-SK2
 - 2. Legal Timberline FF-SK3



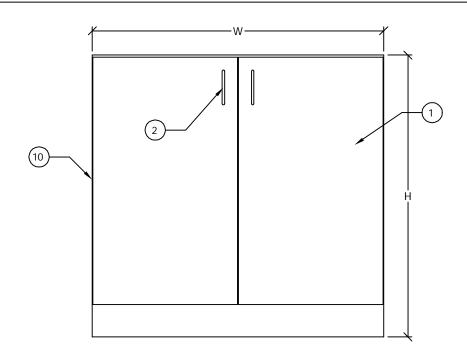


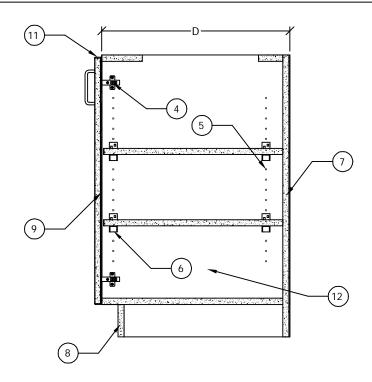
- Doors and Drawer Fronts are Made from 2 Sided GP-28 Panels with an 11/16" Engineered Wood Core
- Door & Drawer Pulls are 4" on Center Metal Wire Pulls with a Dull Chrome Finish
- 3. Drawer Boxes made from 3/4"
 Engineered Wood with Thermally
 Fused Melamine and .018" PVC
 Edging on 100 Pound Bottom Mounted
 3/4 Extension Self-Closing Epoxy
 Coated Slides

- 4. Blum 120° Self-Closing Full Overlay Concealed Hinges
- 5. 5mm Lineboring 32mm on Center Spacing for Adjustable Shelves
- 6. Clear Plastic Dual Pin Shelf Clip Locks both 3/4" & 1" Shelves
- 7. 3/4" Thick Back Inset 1/8" Standard Dado - Glue - Screw Construction Throughout Base

- 8. Integral 4" Toekick
- 9. All exposed Cabinet Edges to Have .018" Color-Thru PVC Banding
- 10. Exposed Cabinet Ends Finished Using a Single Piece of GP-28 Plastic Laminate
- 11. Doors and Drawer Fronts Edged with 3mm Color-Thru PVC to Match Plastic Laminate on Faces
- 12. Thermally Fused Melamine Interior

DATE REVISIONS	2 Door 2 Drawer Base Cabinet	G Grand Valley Wood Products 3113 Hillcroft S.W.	DRAWN BY: TJB APPROVED BY: DEA	Dabab
	W=Any Width From 24" to 48" H=Any Height From 28 3/4" to 46 3/4" D=Any Depth From 13 1/4" to 34 1/4"	Grand Rapids, Michigan 49548 Phone: (616) 475-5890 Fax: (616) 475-5800	JOB # DATE: 11/24/08	B2D2D



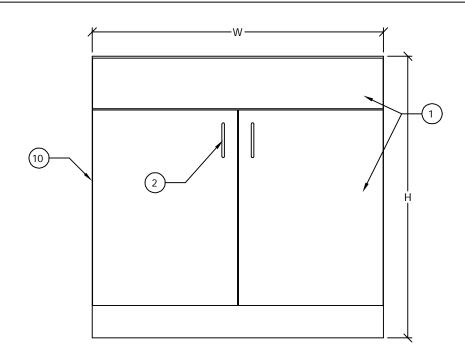


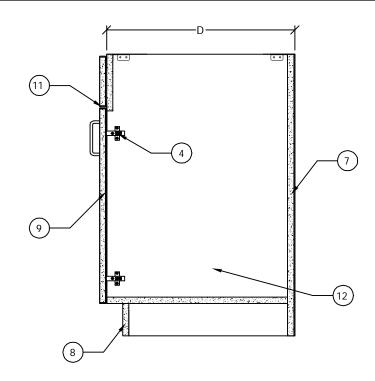
- Doors and Drawer Fronts are Made from 2 Sided GP-28 Panels with an 11/16" Engineered Wood Core
- Door & Drawer Pulls are 4" on Center Metal Wire Pulls with a Dull Chrome Finish
- 3. Drawer Boxes made from 3/4"
 Engineered Wood with Thermally
 Fused Melamine and .018" PVC
 Edging on 100 Pound Bottom Mounted
 3/4 Extension Self-Closing Epoxy
 Coated Slides

- 4. Blum 120° Self-Closing Full Overlay Concealed Hinges
- 5. 5mm Lineboring 32mm on Center Spacing for Adjustable Shelves
- 6. Clear Plastic Dual Pin Shelf Clip Locks both 3/4" & 1" Shelves
- 7. 3/4" Thick Back Inset 1/8" Standard Dado - Glue - Screw Construction Throughout Base

- 8. Integral 4" Toekick
- 9. All exposed Cabinet Edges to Have .018" Color-Thru PVC Banding
- 10. Exposed Cabinet Ends Finished Using a Single Piece of GP-28 Plastic Laminate
- 11. Doors and Drawer Fronts Edged with 3mm Color-Thru PVC to Match Plastic Laminate on Faces
- 12. Thermally Fused Melamine Interior

DATE REVISIONS	2 Door Base Cabinet	G Grand Valley Wood Products 3113 Hillcroft S.W.	DRAWN BY: TJB APPROVED BY: DEA	Bab
	W=Any Width From 24" to 48" H=Any Height From 28 3/4" to 46 3/4" D=Any Depth From 13 1/4" to 34 1/4"	Grand Rapids, Michigan 49548 Phone: (616) 475-5890 Fax: (616) 475-5800	JOB # DATE: 11/24/08	B2D



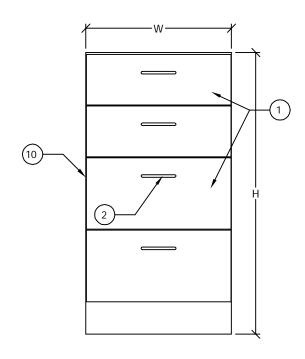


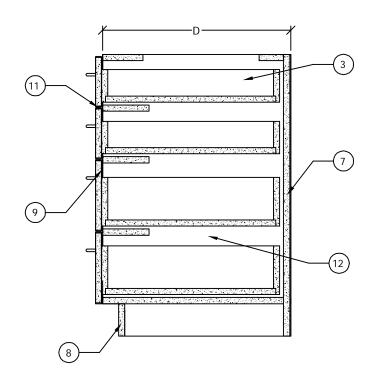
- Doors and Drawer Fronts are Made from 2 Sided GP-28 Panels with an 11/16" Engineered Wood Core
- 2. Door & Drawer Pulls are 4" on Center Metal Wire Pulls with a Dull Chrome Finish
- 3. Drawer Boxes made from 3/4"
 Engineered Wood with Thermally
 Fused Melamine and .018" PVC
 Edging on 100 Pound Bottom Mounted
 3/4 Extension Self-Closing Epoxy
 Coated Slides

- 4. Blum 120° Self-Closing Full Overlay Concealed Hinges
- 5. 5mm Lineboring 32mm on Center Spacing for Adjustable Shelves
- 6. Clear Plastic Dual Pin Shelf Clip Locks both 3/4" & 1" Shelves
- 7. 3/4" Thick Back Inset 1/8" Standard Dado - Glue - Screw Construction Throughout Base

- 8. Integral 4" Toekick
- All exposed Cabinet Edges to Have .018" Color-Thru PVC Banding
- 10. Exposed Cabinet Ends Finished Using a Single Piece of GP-28 Plastic Laminate
- 11. Doors and Drawer Fronts Edged with 3mm Color-Thru PVC to Match Plastic Laminate on Faces
- 12. Thermally Fused Melamine Interior

DATE REVISIONS	2 Door 1 False Drawer Sink Base	G Grand Valley Wood Products 3113 Hillcroft S.W.	DRAWN BY: TJB APPROVED BY: DEA	
	W=Any Width From 24" to 48" H=Any Height From 28 3/4" to 46 3/4"	Grand Rapids, Michigan 49548 Phone: (616) 475-5890 Fax: (616) 475-5800	JOB # DATE:	SB2D1F
	D=Any Depth From 13 1/4" to 34 1/4"	2 2 7 3 (273) 173 3333	11/24/08	



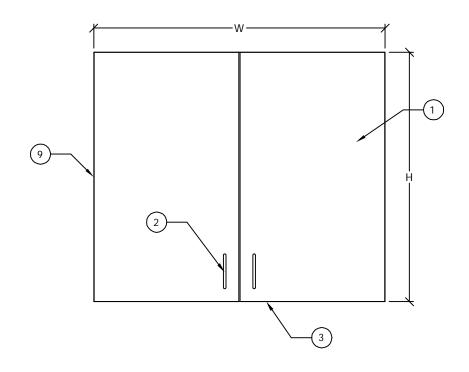


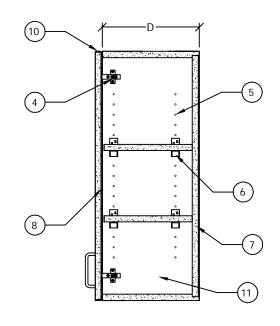
- Doors and Drawer Fronts are Made from 2 Sided GP-28 Panels with an 11/16" Engineered Wood Core
- Door & Drawer Pulls are 4" on Center Metal Wire Pulls with a Dull Chrome Finish
- 3. Drawer Boxes made from 3/4"
 Engineered Wood with Thermally
 Fused Melamine and .018" PVC
 Edging on 100 Pound Bottom Mounted
 3/4 Extension Self-Closing Epoxy
 Coated Slides

- 4. Blum 120° Self-Closing Full Overlay Concealed Hinges
- 5. 5mm Lineboring 32mm on Center Spacing for Adjustable Shelves
- 6. Clear Plastic Dual Pin Shelf Clip Locks both 3/4" & 1" Shelves
- 7. 3/4" Thick Back Inset 1/8" Standard Dado - Glue - Screw Construction Throughout Base

- 8. Integral 4" Toekick
- All exposed Cabinet Edges to Have .018" Color-Thru PVC Banding
- 10. Exposed Cabinet Ends Finished Using a Single Piece of GP-28 Plastic Laminate
- 11. Doors and Drawer Fronts Edged with 3mm Color-Thru PVC to Match Plastic Laminate on Faces
- 12. Thermally Fused Melamine Interior

DATE REVISIONS	4 Drawer Base Cabinet	G Grand Valley Wood Products 3113 Hillcroft S.W.	DRAWN BY: TJB APPROVED BY: DEA	DADD
	W=Any Width From 12" to 36" H=Any Height From 28 3/4" to 46 3/4" D=Any Depth From 13 1/4" to 34 1/4"	Grand Rapids, Michigan 49548 Phone: (616) 475–5890 Fax: (616) 475–5800	JOB # DATE: 11/24/08	B4DB





- Doors and Drawer Fronts are Made from 2 Sided GP-28 Panels with an 11/16" Engineered Wood Core
- 2. Door & Drawer Pulls are 4" on Center Metal Wire Pulls with a Dull Chrome Finish
- 3. Wall Cabinet Bottoms Finished Using a Single Piece of GP-28 Plastic Laminate

- 4. Blum 120° Self-Closing Full Overlay Concealed Hinges
- 5. 5mm Lineboring 32mm on Center Spacing for Adjustable Shelves
- 6. Clear Plastic Dual Pin Shelf Clip Locks both 3/4" & 1" Shelves
- 7. 3/4" Thick Back Inset 1/8" Standard Dado - Glue - Screw Construction Throughout

- 8. All exposed Cabinet Edges to Have .018" Color-Thru PVC Banding
- Exposed Cabinet Ends Finished Using a Single Piece of GP-28 Plastic Laminate
- 10. Doors and Drawer Fronts Edged with 3mm Color-Thru PVC to Match Plastic Laminate on Faces
- 11. Thermally Fused Melamine Interior

DATE REVISIONS	W=Any Width From 24" to 48" H=Any Height From 12" to 60" D=Any Depth From 11 1/4" to 17 1/4"	G Grand Valley Wood Products 3113 Hillcroft S.W.	DRAWN BY: TJB APPROVED BY: DEA	Wab
		Grand Rapids, Michigan 49548 Phone: (616) 475-5890 Fax: (616) 475-5800	JOB # DATE: 11/24/08	W2D