



FILTERPAVE PRODCUTS LLC

FILTERPAVE[®]

QUALITY CONTROL DOCUMENT



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Aggregate Processing Standards (Glass or Stone)

Suppliers approved to supply aggregate for FPPS must comply with the process standards and specifications identified in this document. Aggregate must meet the specifications for processing, treatment, particle size, appearance, moisture control, bagging, quality control, storage and shipping.

Aggregate processing operations certified as FilterPave aggregate suppliers will be subject to quality control audits.

Aggregate Requirements

Glass must be cleaned (recommended to be heated between 175-225 degrees), crushed, gradated and dried to conform to the glass material specification. A roller crusher or impact crusher may be used, but the processed material must be "shard less" with rounded edges and meet the particle size and moisture requirements as identified in the glass material specification.

Stone must be igneous rock with a hardness of 6.2 or higher on the Moh's scale, angular to sub-angular and less than 1% absorption. Stone must also be cleaned, gradated and dried to conform to the stone material specification.

Amino-Silane Treatment

Glass suppliers must treat all supplied glass with an Amino-Silane solution, Silquest A-1120 or equivalent. (stone is **not** treated with Amino-Silane). The Amino-Silane solution shall consist of 0.3% Amino-Silane, with the remainder of the solution being water, and at minimum be applied at a 6% ratio to glass weight. The Amino-Silane is applied to the processed glass prior to drying. The glass may **not** be heated past 400 degrees after the Amino-Silane solution has been applied to avoid degradation of the Amino-Silane. Glass suppliers will keep a project traceable "Amino-Silane run log" to show that appropriate amounts of Amino-Silane have been applied to any glass run. Amino-Silane must be kept above 40 degrees and used within 48 hours of being mixed with water. Any Amino/water solution older than 48 hours is **not** to be used and shall be discarded. Glass suppliers shall keep an Amino-Silane MSDS sheet on file.

SuperSak® Storage Bags

The processed Aggregate must be shipped in FPLLC approved SuperSaks containing an interior poly liner. The sacks shall be a minimum of a 5:1 safety factor and 35"Lx35"Wx35"H. The SuperSaks shall be stored indoors out of sunlight and kept dry. Aggregate shall be added to the SuperSaks immediately following processing. In some cases shipment in bulk will be allowed if pre-approved by FPLLC and if meeting all other QC standards set forth in this guide.

The weight of SuperSaks

The weight of each SuperSak shall be a maximum of 2500 pounds for glass and 3000 lbs for stone.

Temperature of Glass Post-Production

Temperature of glass is critical to the performance of the FilterPave system. Prior to closure, the temperature of glass within each SuperSak shall be taken to ensure the glass has adequately cooled. The temperature of the glass shall be less than 150° F when the liner of the SuperSak is closed.

Grab Samples

A cubic foot sample size of material shall be taken at the start of a batch, every 20 supersaks and at the end of the batch. The material should be taken as it falls off the conveyor belt that feeds the SuperSak loading. The sample should be tagged with the batch number and born on date corresponding to the bag it was taken. Samples are to be held by the vendor for a period of time to be determined and shall be used for quality control testing.

Moisture of Aggregate

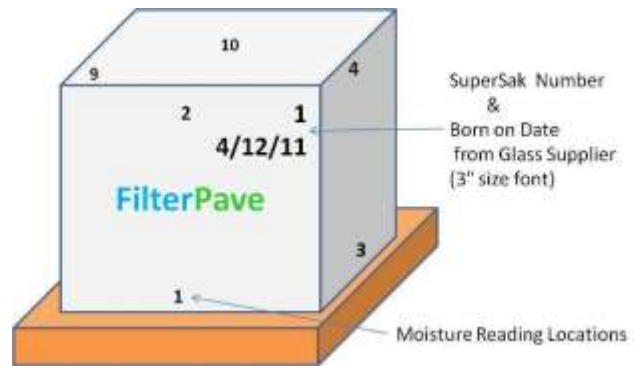
Moisture of aggregate is critical to the performance of the FilterPave system. Moisture readings of each filled SuperSak shall be taken with a FPLLC approved moisture meter prior to closing each SuperSak liner. If moisture readings are not acceptable, dry the aggregate and re-take the readings. With acceptable moisture readings, place a "Born on Date" in 3" font size written in permanent marker on the front face of the SuperSak.

Immediately preceding a shipment of glass to a project site or contractor location the Aggregate Supplier shall complete its portion of the Moisture Log following the procedure outlined on the Log. A minimum of 4 readings must be taken and 2 or more at the bottom sides of the sack.

A SuperSak of aggregate with average moisture readings of 10% or greater shall be rejected. If any reading is greater than 15% or the average is >10% the glass is not acceptable. If 3 readings average 9-11% take two additional readings inside the SuperSak in locations 9 and 10, if either one is above 10% reject that SuperSak from the load.

To ensure accurate individual readings, the probe should be wiped between the moisture readings.

SuperSaks with appropriate moisture content shall be given sequential "batch numbers" and it shall be written in 3" font size in permanent marker on the front face of the SuperSak near the "Born on Date".



Closure of SuperSaks

SuperSak liners shall be closed when the temperature and moisture of glass is acceptable. SuperSak liners shall be closed by twisting the inner liner tightly, goose necking, then securing with a Zip Tie or wire. Aggregate shall not be stored in open SuperSaks. Aggregate shall be produced and SuperSak liner closed on the same day.

Labeling of SuperSaks

The Aggregate supplier will print the SuperSak "number #1 thru #XX" and the "Born on date" of the aggregate with permanent marker in 3" size font on the front face of each SuperSak to be supplied to a project.

Storing of SuperSaks

SuperSaks must be stored on suitable quality shipping pallets in a dry environment. SuperSaks should not be stored outside or in areas exposed to weather or standing water unless proper care is taken to cover and keep each supersak dry.

Shipping of SuperSaks

SuperSaks must be shipped on covered watertight flatbed trucks, curtainside vans or standard dry vans.



Aggregate Material Specification

Glass Material Specification

Glass approved for use with the FilterPave system must meet the material specification standards outlined below. Glass that does not meet the specification will be rejected and returned to the Glass provider at the Glass provider's expense.

Item	Specification
Amino-Silane Treated	Glass must be Amino-Silane treated 6% solution to glass weight.
Glass Particle Size	Shard-less and round-edged glass, 100% passing #4, retained on #12 screen, with 5% fines maximum.
Colors	Mixed, vary by region
Moisture (when bagged)	0-<10%. Bagged glass with 10% average moisture or more will be rejected.
SuperSak	5.1 or better load rated and 3" hand written SuperSak number with Born on date.
SuperSak Capacity	2500 Lb. Max

Stone Material Specification

Stone approved for use with the FilterPave system must meet the material specification standards outlined below. Stone that does not meet the specification will be rejected and returned to the Stone provider at the Stone provider's expense.

Item	Specification
Stone Type	Igneous Rock, angular to sub-angular, 6.2 or higher on Moh's hardness scale, 0-<1% absorption
Stone Particle Size	100% passing 1/4" screen, retained on #12 screen, with 5% fines maximum.
Colors	Brown, Tan, Gold, Red, Black, Gray. (Vary by region)
Moisture (when bagged)	0-<10%. Bagged aggregate with 10% average moisture or more will be rejected.
SuperSak	5.1 or better load rated and 3" hand written SuperSak number with Born on date.
SuperSak Capacity	3000 Lb. Max



Polyurethane (PUR) Material Process & Standards

The polyurethane material used with the FilterPave system consists of Resin and ISO. The polyurethane must be purchased from Filterpave Products LLC and is manufactured by BASF. Contractor shall keep a MSDS sheet of the polyurethane on file.

Color Pigment

Pigment is added to Resin portion by the contractor. Pigment should be thoroughly agitated before being added to the resin. Pigment percentage shall be communicated to the contractor by FPLLC.

PUR Storage

The polyurethane ISO and Resin materials are shipped in separate water tight containers referred to as totes. Small quantities of these materials are shipped separately in 55 gallon drums. Totes and drums must be stored inside according to manufacturer's recommendations below. Colder temperatures below the optimal range may be acceptable, but will adversely affect viscosity. Contact FPLLC for guidance.

Once totes and drums are unsealed, use approved manufacturer desiccant caps to ensure moisture is not introduced.

PUR Storage Temperatures:

Polyurethane Component	Optimal Storage Temperature	
Resin	21-32°C	70-90° F
ISO	21-32° C	70-90° F

PUR Weights:

Polyurethane Component	Drum Color	Lbs.	Gallons
Resin Drum	Blue	400 lbs.	55 gal
Resin Tote	N/A	2000 lbs.	275 gal
ISO Drum	Red	500 lbs.	55 gal
ISO Tote	N/A	2535 lbs.	275 gal

Contractor Materials Process & Standards

Suppliers approved to supply aggregate for the FilterPave system must comply with the process standards and specifications identified in this document. Aggregate must meet the specifications for processing, treatment, particle size and appearance, moisture control, bagging, quality control, storage and shipping.

Aggregate processing operations certified as FilterPave glass suppliers will be subject to quality control audits.

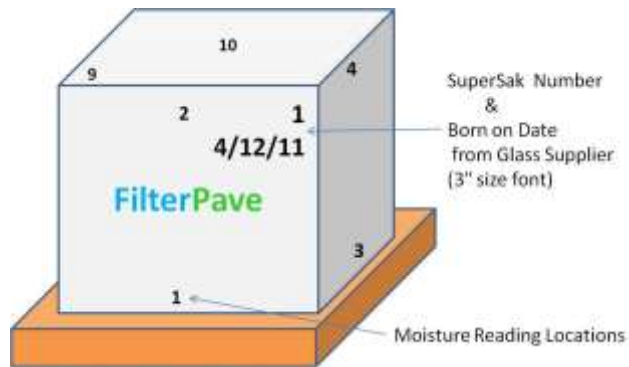
Receipt of Materials

Contractor shall take inventory of incoming PUR totes or drums and SuperSaks and note discrepancies to FPLLC immediately by contacting the Product Manager at 573-228-9025.

Moisture Reading of Aggregate:

Upon receipt, contractor shall take SuperSak moisture readings with FPLLC approved moisture meters. Readings shall be taken of each glass SuperSak in eight locations as identified in the drawing shown on the Moisture Log. Contractor shall note any discrepancies immediately by contacting the Product Manager at 573-228-9025.

Aggregate with average moisture reading of 10% or greater shall be rejected and may be returned to the glass supplier at glass supplier's expense. If any reading is greater than 15% or the average is >10% the glass is not acceptable. If 3 readings average 9-11% take two additional readings inside the SuperSak in locations 9 and 10 if either one is above 10% reject the SuperSak.



Completion of Project Moisture Log:

Upon receipt of SuperSaks, contractor must complete the FilterPave Project Warranty Moisture Log and fax or email to FPLLC in order to be eligible for the 1-Year Materials Warranty.

Storage of Materials

PUR and SuperSaks must be stored on suitable quality shipping pallets in a dry environment. Pallets **should not** be stored outside or in areas exposed to weather or standing water. If SuperSaks are stored for short periods outside, such as for staging at the job site, they must be covered with a water tight tarp and located on high ground. **If aggregate is stored outside, moisture readings must again be taken prior to the start of the installation.** Aggregate with moisture average moisture reading of 10% or greater shall be rejected. If any reading is greater than 15% or the average is >10% the glass is not acceptable. If 3 readings average 9-11% take two additional readings inside the SuperSak in locations 9 and 10 if either one is above 10% reject the SuperSak.

Resin & ISO Ratios

The Resin to ISO ratio is 0.589 parts Resin to 0.411 parts ISO. Note: Always agitate resin thoroughly before use. Always have desiccant caps in place on totes before pumping.



Mixing Resin & ISO

The Resin and ISO shall be mixed using a static mixer. Replacement mixers and pump parts can be acquired through the pump supplier or by calling FPLLC at 573-228-9025

Calibration

Filterpave Calibration Quick Reference Guide

Calibration must be run each time the machine is turned on.

Calibrate the Aggregate

1. Turn on machine (allow warm-up time for hydraulics)
2. Charge the bin
3. Tare the garbage can
4. Turn on the auger
5. Charge the belt
6. Put garbage can under auger outlet
7. Run the belt for 10 seconds (important to be as close as possible to 10 sec.)
8. Allow all the aggregate in the auger to run out
9. Weigh the garbage can (subtract tare weight)
10. Multiply weight by 6 to obtain weight /min.
11. Adjust gate settings and/or belt speed as needed (target 600-1000lbs/min)

Check Ratio of Polyurethane Components

1. Uncap the Resin and ISO lines
2. Tare a bucket
3. Use 4 buckets, 2 to calibrate/check ratio, 2 for waste.
4. Start pumps with lines in waste buckets
5. Move lines to calibration buckets and run for 30 seconds
6. Move lines back to waste buckets
7. Weigh Resin and ISO buckets (subtract tare weight)
8. Calculate the ratio of Resin to ISO (R/I target ratio 1.38-1.47)
9. If target ratio is not with this range contact FPLLC.

Check Total Output of Polyurethane

1. Attach mix head and static mixer
2. Use 2 buckets, 1 for waste and 1 for output check
3. Start pumps with mixer in waste bucket
4. Move mixer to calibration bucket start timer and run for 30 seconds
5. Move mixer back to waste bucket and turn off machine
6. Weigh output check bucket (subtract tare weight) & multiply by 2 to obtain Lbs/min (target 25-43 Lbs/Min)

Matching Output of Aggregate and Polyurethane

1. Divide the polyurethane /min by the aggregate/min, multiply by 100 (target 4.2- 4.5)
2. Adjust the urethane output or aggregate output if needed.

All calibration data shall be document on the Calibration Log



Top Coat Material Process & Standards

The topcoat material is used only with the FilterPave Glass series, or in the Stone series with 11-20% glass blend on the top surface. The Stone series with 0 - 10% glass blend on the top surface does not require top coating. The topcoat must be supplied from Filterpave Products LLC. Top coat consists of a two-part kit, Part A and Part B. Contractor shall keep a MSDS sheet of the two parts of the top coat material on file.

Color Pigment

The specified color pigment shall be added to Part B (3-gallon container). Pigment shall be stirred into Part B until the color is evenly distributed.

Application Process

A dual component, low air pressure sprayer is the required method of application for topcoat. The machine will maintain the appropriate ratio and will static mix the material just prior to aspiration. When operated correctly this method offers the most consistent application of material. All contractors are required to be properly trained in the application of the topcoat material and all prescribed safety precautions are required.

In cases where exception may need to be made, the top coat shall be evenly applied by roller with ¾" nap. Roller shall be replaced as needed when spreading becomes difficult due to excess material build up on the roller. As much as 1 quart of Acetone per 3 gallon kit may be added to reduce viscosity of the material and lengthen the pot time. Dispose of used rollers and equipment in regular trash.

Two coats, 5 mils thick, of FPLLC approved surface binder material shall be applied to the Filterpave installation no sooner than 4 hours after installation is completed. Pavement must be free of dirt, debris and moisture before applying top coat. Application rate is 450 sf/3 gallon kit. Spray the first layer 5 mils thick over a section in a horizontal pattern. Spray a second layer also 5 mils thick, at a pattern 90° to the first layer over the same section. Continue process until the desired area is covered at approximately 10 mils thick. The top coat shall be applied in ambient temperature 20 - 95° F. If the ambient temperature is below 60° the topcoat material temperature must be maintained between 60° - 90° F until applied.

Note; Tape-off and cover walls, plants, objects etcetera that are to be protected from excess splatter!

Mixing of Top Coat (If applied with a roller)

The entire contents of Part A and Part B (with pigment already blended) top coat shall be mixed together, scraping edges of bucket to ensure all material is added to the mixing bucket. The material shall be stirred, not whipped until the two parts are blended.

Working Time & Temperature (If applied with a roller)

Top coat application is critical to FilterPave system performance. Working time of mixed top coat material is 15-20 minutes before top coat material will begin to set up. As much as 1 quart of Acetone per 3 gallon kit may be added to reduce viscosity of the material. If the entire pre-mixed top coat is not applied within the working time, swelling, cracking & discoloration may result. Plan number of workers to apply all top coat material within working time guidelines (*under normal circumstances, two workers can apply 3-gallon top coat material within 20 minutes*).

Re-Application / Maintenance

Top coat may need to be re-applied when pavement needs to be refreshed. FPLLC recommends consideration be given to selling a one year follow-up topcoat application to be sold as part of the initial sale. Average re-application can be from 2 – 5 years depending on many factors.



Construction Process & Standards

Installation Method

Contractors should follow the installation process outlined in the Contractor Manual. Adherence to temperature and moisture guidelines is critical to the performance of the FilterPave system. Contractor should be prepared with installation and finishing tools.

Installation Clean up

All excess materials should be removed from the project site in a timely fashion. Unused polyurethane and aggregate should be stored in dry conditions as outlined in PUR Storage in this document.

Inline Testing

Contractors should submit (2) cylinder at the start and (2) cylinder at the end of each continuous pour. If a pour is more than 5000 square feet (2) cylinders should be taken at approximately in the middle of the pour and for each 5000 square feet. Contractors are responsible to send all samples to a certified testing facility following the FPLLC standards below.

Test Cylinder Preparation

1. Once mix ratio is set, and the pour begins, pour a test cylinder in accordance with the established FPLLC procedure, listed below, using a 3" diameter, 6" deep cylinder and send to FPLLC's certified partner for analysis.
 - a. Fill the cylinder 1/3 full and drop on a hard surface, from a height of 3 to 4 inches, 5 times.
 - b. Fill the cylinder to 2/3 full and repeat drop from 3 to 4 inches on a hard surface, 5 times.
 - c. Fill cylinder to overflowing, compact and screed off with the edge of a 2" x 4" or similar item.
2. Average FilterPave Glass Series compression strength of 1000 PSI with no results below 900PSI is required for each day's cylinders to be eligible for a Warranty.
3. Average Filterpave Stone Series compression strength of 800 PSI with no results below 700 PSI is required for each day's cylinders to be eligible for a Warranty.
4. **Critical: cylinders must be prepared exactly per #1 above.**



Quality Control Records

Quality control records will be maintained by FPLLC for specific FilterPave process materials, samples and documentation:

- Glass suppliers shall keep “Amino-Silane run logs”
- Contractors shall complete Project Logs;
 - Supersak Batch & Moisture Log
 - Calibration Log
 - Compression Test Log
 - Materials Log of PUR, Pigment & Topcoat Batch logs

Contractor Handbook List

A master list shall be maintained at FPLLC of the contractors who have received a FilterPave Contractor Handbook. The date sent and manual date shall be recorded. The master list shall be maintained in the FilterPave database.

APPENDIX

- **Moisture Log:**
- **Materials Log:**
- **Compression Test Log:**
- **Daily Calibration Worksheet:**
 - Volumetric Truck Calibration
 - Polyurethane Machine Calibration
 - Matching Output of Aggregate and Polyurethane

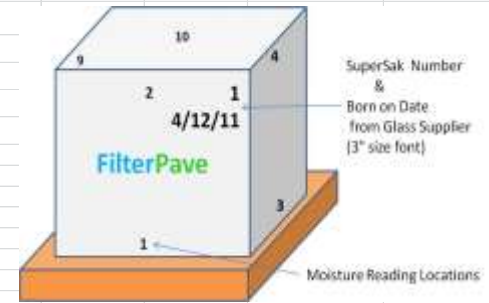
Moisture Log FilterPave: Pg 1

Moisture Log - FilterPave

Today's Date:		Page #:	1
Contractor Name:			
Shipping Address:			
FPLLC Contact:	Phone 573-228-9025- email: info@filterpave.com		

1. Aggregate Supplier assigns sack batch#, completes Moisture Log upon shipment, sends copy with shipment and copy to FPLLC within 24 hrs after shipment date.
2. Contractor completes a Moisture Log and sends to FPLLC within 24 hr after receiving date.
3. Contractor completes a Moisture Log and sends to FPLLC within 24 hr after installation date.

If 1-8 readings have an Average of greater than 10% isolate the wet SuperSak and open and take readings 9 & 10.
 If readings 9 & 10 are above 10% ... don't use the SuperSak until properly dried. Call FPLLC and advise plan.



Sack-Batch#		Moisture % Readings in following Location Number										Ave	Inside Corner	Inside Center
		Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top			
		1	2	3	4	5	6	7	8			9	10	
	Glass Supplier													
	Contractor - Glass Arrival													
	Contractor - Day of Glass Install													
	Glass Supplier													
	Contractor - Glass Arrival													
	Contractor - Day of Glass Install													
	Glass Supplier													
	Contractor - Glass Arrival													
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	Glass Supplier													
	Contractor - Glass Arrival													
	Contractor - Day of Glass Install													



Moisture Log FilterPave: Pg 2

Moisture Log - FilterPave													
Today's Date:		Page #:											
Contractor Name:													
Shipping Address:													
FPLLC Contact:	Phone 573-228-9025- email: info@filterpave.com												
Moisture % Readings in following Location Number													
Sack-Batch#	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Bottom	Top	Ave	Inside Corner	Inside Center
Glass Supplier													
Contractor - Glass Arrival													
Contractor - Day of Glass Install													
Glass Supplier													
Contractor - Glass Arrival													
Contractor - Day of Glass Install													
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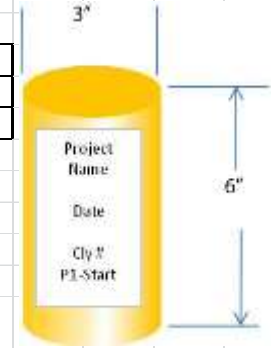
Last revised: 11/26/2012

Compression Test Log: FilterPave

Compression Test Log - FilterPave

Today's Date:		Today's Time:		Technician:	
Project Name:					
Project Address:					
FPLLC Contact:	Phone 573-228-9025, email; info@filterpave.com				

1. Contractor to provide Test Cylinders, Compression Test Samples and Testing at a local certified test lab.
2. Contractors to make (2) cylinder at the start and (2) cylinder at the end of each continuous pour, repeat every 5000 sq ft.
3. Contractor to mark Test Cylinders with Project Name, Date and as P# - Start or P#- End.
4. Contractor to complete Compression Test Log and return to Presto to be eligible for a Project Warranty Document.



Continuous Pour Number	Pour Date	Compression fail (PSI)		Note; Weather conditions, dew point, ambient temperature, humidity
		First Sample Cylinder	End Sample Cylinder	
1		P1 -Start:	P1 - End:	
2		P2 -Start:	P2 - End:	
3		P3 -Start:	P3 - End:	
4		P4 -Start:	P4 - End:	
5		P5 -Start:	P5 - End:	

Contractors are responsible to send all cylinders to a certified testing facility for Compression Testing.

Test Cylinder Preparation
1. Once mix ratio is set, and the pour begins, pour a test cylinder in accordance with the established FPLLC procedure listed below.
Using a 3" diameter x 6" deep concrete test cylinder;
a. Fill the cylinder 1/3 full and drop on a hard surface, from a height of 3 to 4 inches, 5 times.
b. Fill the cylinder to 2/3 full and repeat drop from 3 to 4 inches on a hard surface, 5 times.
c. Fill cylinder to over flowing, compact and screed off with a 2" x 4" or similar item.
d. Cylinders should laboratory cured for 7 days in dry ambient air conditions.
2. Average FilterPave Glass Series compression strength of 1000PSI with no results below 900PSI are required for each day's cylinders to be eligible for a Warranty.
3. Average FilterPave Stone Series compression strength of 800 PSI with no results below 700 PSI are required for each day's cylinders to be eligible for a Warranty.
4. Critical: cylinders must be prepared exactly per #1 above.

Last revised: 11/29/2012



Daily Calibration Worksheet: Volumetric Truck Calibration

Filterpave Daily Calibration Work Sheet

Today's Date	
Project Name	
Project Location	

Volumetric Truck Calibration

Step 1 Turn truck hydraulics on for 5 minutes prior to calibration	Completed by : <input style="width: 100%;" type="text"/>
Step 2 After loading materials check auger for proper operation and set it to the proper angle for loading transfer buckets (change in auger angle/height requires	Auger angle setting: <input style="width: 100%;" type="text"/>
Step 3 Tare 55 gallon trash can on scale	Can tare weight (lbs): <input style="width: 100%;" type="text"/>
Step 4 Place trash can beneath auger outlet, charge belt and auger ensuring a steady flow of material from auger, leave auger running	
Step 5 Empty trash can, then turn on belt for 10 seconds and capture materials in trash can, weigh the can, subtract the tare weight from the trash can weight to obtain the material weight	Trash can weight: <input style="width: 100%;" type="text"/> Material weight: <input style="width: 100%;" type="text"/>
Step 6 Multiply by 6 to determine the weight per minute	Material weight /min. <input style="width: 100%;" type="text"/>
Step 7 Adjust gate settings and/or belt speed as needed to achieve recommended target of 600 to 1000 lbs/min. When desired weight is achieved calibrate 3 more times to verify results (subtract tare and multiply by 6 for each number)	Weight verification #1 <input style="width: 100%;" type="text"/> Weight verification #2 <input style="width: 100%;" type="text"/> Weight verification #3 <input style="width: 100%;" type="text"/>
Step 8 Add the 3 verification numbers and divide by 3 to obtain the average aggregate output	Aggregate/min.: <input style="width: 100%;" type="text"/>

If only 1 type of aggregate is used, proceed to Polyurethane Machine Calibration, if a second type of aggregate will be used in the mix design - complete this page for the second aggregate, add the two numbers from step 8 to obtain the total aggregate/min.



Daily Calibration Worksheet: Polyurethane Machine Calibration

<u>Filterpave Daily Calibration Work Sheet</u>									
Today's Date									
Project Name									
Project Location									
<u>Polyurethane Machine Calibration</u>									
Step 1 Open all the valves on the urethane machine, uncap the material lines, and tare 2 buckets	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Tare wt. resin (lbs):</td> <td></td> </tr> <tr> <td>Tare wt. iso (lbs):</td> <td></td> </tr> </table>	Tare wt. resin (lbs):		Tare wt. iso (lbs):					
Tare wt. resin (lbs):									
Tare wt. iso (lbs):									
Step 2 After loading materials check auger for proper operation and set it to the proper angle for loading transfer buckets (change in auger angle/height requires recalibration)	Auger angle setting:								
Step 3 Record the weight of each bucket, then subtract the tare weight to obtain the material weight for resin and	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Resin bucket wt.:</td> <td></td> </tr> <tr> <td>Resin material wt.:</td> <td></td> </tr> <tr> <td>Iso bucket wt.:</td> <td></td> </tr> <tr> <td>Iso material wt.:</td> <td></td> </tr> </table>	Resin bucket wt.:		Resin material wt.:		Iso bucket wt.:		Iso material wt.:	
Resin bucket wt.:									
Resin material wt.:									
Iso bucket wt.:									
Iso material wt.:									
Step 4 Calculate the ratio by dividing resin weight by the iso weight (target ratio is 1.38 to 1.47)	Ratio:								
Step 5 Add the weight of the resin material and the iso material to obtain the total calibration weight per 30 seconds	Total calibration wt.:								
Step 6 Attach the mix head and static mixer, weigh an additional bucket and record the tare weight, place mixhead over a waste bucket and turn on the machine, catch material in waste bucket until steady flow is observed, transfer flow to the tared bucket for 30 seconds, then move back to waste bucket and turn off machine, weigh bucket, calculate material weight	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Tare weight:</td> <td></td> </tr> <tr> <td>Final bucket weight:</td> <td></td> </tr> <tr> <td>Total material weight:</td> <td></td> </tr> </table>	Tare weight:		Final bucket weight:		Total material weight:			
Tare weight:									
Final bucket weight:									
Total material weight:									
Step 7 Compare the sum of the resin calibration material + iso calibration material (Step 5, Total calibration wt.) to the total material weight (Step 6)...If these numbers differ by more than 2%, troubleshoot the problem (there may be blockage in lines, mix-head or mixer)									
<i>Page 2 of 3</i>	Operator:								



Daily Calibration Worksheet: Matching Output of Aggregate and Polyurethane

Filterpave Daily Calibration Work Sheet			
Today's Date			
Project Name			
Project Location			
Matching Output of Aggregate and Polyurethane			
Step 1	Use the 30 second calibration weight of Polyurethane from page 2 Step 6 and multiply by 2 to achieve polyurethane output per minute.	Polyurethane/minute:	<input style="width: 100%;" type="text"/>
Step 2	After loading materials check auger for proper operation and set it to the proper angle for loading transfer buckets (change in auger angle/height requires recalibration)	Aggregate/minute: Auger angle setting:	<input style="width: 100%;" type="text"/>
Step 3	Divide polyurethane/minute by aggregate per minute, multiply by 100 (target range is 4.2 to 4.5%)	% Polyurethane:	<input style="width: 100%;" type="text"/>
Step 4	Adjust polyurethane or aggregate as needed to achieve proper ratio		
Example calculations:			
Page 1- Volumetric Truck Calibration			
Typical weight of 55 gal trash can = 9lbs	Tare weight (lbs):		9.0
From 10 second calibration with belt and auger charged	Trash can weight:		109.0
Subtract tare from can weight after material discharge	Material weight:		100.0
Multiply by 6 to get material discharge for 1 minute	Material weight/min:		600.0
Average the 3 verification runs (598,612,606)	Aggregate/min in:		1326.6
Page 2- Polyurethane Machine Calibration			
A typical 5 gallon bucket weighs 2.5lbs	Tare weight resin(lbs):		2.5
Resin+bucket (30 seconds dispense)	Resin bucket weight:		17.5
Subtract tare from resin bucket	Resin material weight:		15.0
Subtract tare from iso bucket	Iso material weight:		11.4
Divide resin material weight by iso material weight	Ratio:		1.41
Add resin material weight and iso material weight	Total calibration weight:		25.4
Subtract tare weight from Final bucket weight	Total material weight:		25.3
Page 3- Matching Output of Aggregate and Polyurethane			
Total material weight from p.2, step 6, multiplied by 2	Polyurethane/minute:		25.4
Average aggregate/minute from p.1, step 8	Aggregate/minute:		605.3
Polyurethane/minute divided by Aggregate/minute, multiplied by 100	%Polyurethane		4.20%
Page 3 of 3		Operator:	<input style="width: 100%;" type="text"/>