# COUNCIL WORKSHOP ITEM

**ITEM:** Apparatus Floor Sealing- Fire Station 5
**DATE:** March 6, 2001
**PREPARED BY:** Paul Segalla
**PURPOSE:** Approve a contract for industrial floor coating for the apparatus bay at Fire Station #5, 6701 Main Street.

**DISCUSSION:** The Fire Department has requested industrial floor coating for Fire Station #5 in the five-year capital improvement program. It is currently budgeted in 2000-01 in the amount of $9,000.

The application of a floor coating will improve the appearance and prolong the service life of the concrete floor in the apparatus bay. In addition, it will greatly enhance the safety of the surface by utilizing an abrasive finish. The floor at Station 5 was originally installed when the building was constructed in 1985. This floor is unprotected and is vulnerable to damage caused by grease, oil, chemicals and abrasion. The floor coating specified is 1/8" thick and incorporates colored quartz aggregates with 100% solid epoxy resin and finished with a chemically resistant grout and seal coat.

The department received proposals from three vendors. Stonhard Inc of Rosemont, IL submitted a proposal with two different finishes. These systems were priced at $18,000 and $20,500 respectively. Durabond Flooring of Lisle submitted a proposal for $22,050 and Artlow Systems of Addison submitted a proposal in the amount of $15,750. Artlow also included an optional 5% discount if payment is received within five days of the completed work.

Each of the vendors appears to use a very similar product and process. For this reason, the department contacted references supplied by the vendors. Artlow supplied a list of 20 previous fire department customers. Seven of these were contacted and all had very favorable recommendations.

**ATTACHMENT:**
Proposals from the three vendors are attached along with an informational brochure from Artlow.

**RECOMMENDATION:**

The Fire Department recommends the approval of a contract for coating the apparatus floor of Fire Station #5 to Artlow Systems in the amount of $15,750. It is expected that the work will take five days to complete and will be scheduled in mid to late April. The amount budgeted for this work is based on an estimate given three years ago by Serv All, a Downers Grove company that has done the other fire stations but is now out of business. The additional amount needed to cover the difference in the project will come from funds budgeted for the roof replacement at Station 5 which will not be completed this fiscal year.

105 S. Fairbank St. • Addison, IL 60101 • (630) 543-8111 • 1(800) 5-ARTLOW • Fax (630) 543-8171

*"The Professional Concrete Protectors" ...Serving The Nation Since 1963*

ARTLOW Systems
DIVISION OF ARCHEM, INC.

# PROPOSAL

November 8, 2000

Dep. Chief Paul Segalla
Downers Grove Fire Department
3900 Highland Avenue
Downers Grove, IL 60515

RE:
6701 S. Main

*Sooner Or Later You'll Use ARTLOW SYSTEMS...*
A Union Contractor

We respectfully submit herewith our proposal for furnishing all labor, equipment and material for...

## PREPARATION

- ☐ Scrape
- ☐ Spot Grind
- ☐ Hand Sweep ☐ Machine Sweep
- ☐ Hand Scrub ☐ Machine Scrub
- ☐ Strip w / Arstrip to remove
  - ☐ Painted Lines ☐ Glue
  - ☐ Old Coating ☐ Latex
  - ☐ Mastic
- ☐ Strip w / Arsolve to remove
  - ☐ Rubber Marks ☐ Curing Agent
- ☐ Acid Etch ☐ Normal ☐ Mild
- ☐ Scrub w / Ardition
- ☐ Rinse w / Clear Water
- ☐
- ☐ Pressure Wash
  - ☐ Dock(s)
  - ☐ Wall(s)/Ceiling(s)
- ☐ Water Sandblast
- ☒ Shotblast
- ☐ Grit Screen
- ☐ Sand
- ☐ Solvent Tack
- ☐ Tile Removal
- ☐ Saw Cut Keyway(s)
- ☐ Scarify
- ☐ Scabble
- ☐
- ☐

## COATING / SEEDED SYSTEM / OVERLAYMENT

- ☐ Primer
- ☐ Overlay System _____" depth
  By _____
- ☒ Decorative Quartz System
  By General Polymers Ceramic Carpet
  - ☐ Single Seeded ☒ Double Seeded
- ☒ With Ten (10) Year Warranty.
- ☐
- ☐
- ☐ Clear
- ☒ Color Of Choice see **(C)** below
- ☒ Hand Apply 4 Coats
- ☐ Spray _____ Coats
- ☐ Anti-slip Between Coats
- ☐ **Minimum _____ Days Required Before Coating**

**A) PREP / MISC. / COATING** (PER ABOVE) 4200 sq ft @ $ 3.75 per sq ft . . . . . $ 15,750.00
**B) CURING** — If Compound Other Than Water Based Was Used—It Must Be Removed At . . . . . $ _____ per sq ft
**C) COLOR** — Add'l per sq ft (PER ABOVE) _____ sq ft @ $ _____ per sq ft . . . . . $ _____
**D) 4"** 276' **LINES** ☐ Sprayed ☒ Hand Applied _____ lin ft @ $ _____ per lin ft . . . $ Included
**E) UNDERSEALING** _____ lin ft @ $ _____ per lin ft . . . . . $ _____
☐ Fly Ash / Portland Cement Mix @ $ _____ per bag ☐ Labor $ _____ per hr / per man
**F) UNDERLAYMENT** _____"depth @ _____ sq ft @ $ _____ per sq ft . . . . . $ _____
**G)** ☐ **COVE** _____" ☐ **CHAMFER** _____ lin ft @ $ _____ per lin ft . . . . . $ _____
☐
☐

## CONSTRUCTION JOINTS / SAW CUTS — Prepare And Install To Manufacturer Specifications...

| | | | | | |
|---|---|---|---|---|---|
| ☒ Const. Joints | _____ x _____ | fill with _____ | _____ lin ft @ $ _____ | per lin ft . . | $ Included |
| ☒ Saw Cuts | _____ x _____ | fill with _____ | _____ lin ft @ $ _____ | per lin ft . . | $ Included |
| ☐ Perimeter | _____ x _____ | fill with _____ | _____ lin ft @ $ _____ | per lin ft . . | $ _____ |
| ☐ Diamonds | _____ x _____ | fill with _____ | _____ lin ft @ $ _____ | per lin ft . . | $ _____ |

NOTE: Caulking Prior To Manufacturers Specs May Result In Separation Of Joint Sealant On Either Side Or Down The Middle Due To Natural Shrinkage Of New Concrete...See Separate Manufacturers Guidelines Enclosed.

## CRACK REPAIR — Rout & Sand Or Grind To Grade

- ☐ Fill with Epoxy Matrix _____ lin ft @ $ _____ per lin ft . . . . . $ _____
- ☐ Fill with Cementious Material _____ lin ft @ $ _____ per lin ft . . . . . $ _____
- ☐ Patch Misc _____ Holes @ $ _____ per hole . . . . . $ _____

## JOINT RE-CONSTRUCTION

- ☐ Saw Cut ☐ Break Out
- ☐ Fill with Epoxy Matrix _____ lin ft @ $ _____ per lin ft . . . . . $ _____
- ☐ Fill with Cementious Material _____ lin ft @ $ _____ per lin ft . . . . . $ _____
- ☐

## FOOTAGES ARE APPROXIMATE FOR BIDDING AND WILL BE FIELD MEASURED AT TIME OF SAID WORK...

- ☒ To be completed in 1 phase(s), 5 day(s) per phase. Add _____ day(s) for caulking.
- ☒ Price based on ☒ Weekday ☐ Weekends Add _____ for Weekends, Nights & Holidays.
- ☐ Price includes the removal and disposal of _____ drums of waste stripper. ☐ If it is determined that waste from your facility has PCB contamination, You will be liable for additional disposal costs. (See box on reverse.)

**TERMS OF PAYMENT - Net 30 Days...**1½% will be added to invoice after 30 days if payment in full is not received.
5 % discount if payment, in full, is received within (5) working days of completion of said work. 14,962.50
($3,563)

105 S. Fairbank St. • Addison, IL 60101 • (630) 543-8111 • 1(800) 5-ARTLOW • Fax (630) 543-8171

ARTLOW Systems

# FIRE DEPARTMENT REFERENCES

**Addison FPD**
10 S. Addison Road
Addison, IL 60101
**(Granite) 11/98**

Timothy F. Deutschle
(630) 628-3100

**Arlington Heights FD ***
1100 N. Arlington Heights Rd.
Arlington Heights, IL 60005
**(Slate)**

Bruce Rodewald
(847) 368-5450

**Bartlett FPD**
234 N. Oak Avenue
Bartlett, IL 60103
**(Granite) 1/00**

Steve Figved
(630) 837-3701

**Bloomingdale FPD ***
179 S. Bloomingdale Rd.
Bloomingdale, IL 60108
**(Granite)**

Tim Marrocco
(630) 894-8488

**Carol Stream FPD**
500 N. Kuhn Road
Carol Stream, IL 60188
**(Red) 7/96**

Mark Bodane
(630) 668-4836

**Darien-Woodridge FPD**
7550 Lyman Avenue
Darien , IL 60561
**(Canada Brown) 9/98**

Robert J. Tinucci
(630) 910-2200

**Deerfield-Bannockburn FPD (2)**
500 Waukegan Road
Deerfield, IL 60015
**(Gray) 5/98**

James Quinn
(847) 945-4066

**Dixon Rural FPD**
1020 Palmyra Street
Dixon, IL 61021
**(Granite) 5/99**

Kevin E. Lalley
(815) 284-6897

**Glenside FPD**
1608 Bloomingdale Road
Glendale Heights, IL 60139
**(Granite) 9/97**

Ralph L. Blust
(630) 668-5323

**Highland Park FD**
1130 Central Avenue
Highland Park, IL 60035
**(Harbour Gray) 12/98**

David Campagni
(847) 433-3110

**Lake Villa FPD**
910 E. Grand
Lake Villa, IL 60046
**(Ocean Blue) 10/99**

Frank Slazes
(847) 356-2525

**Libertyville FD (Abbott Park)**
1551 N. Milwaukee Avenue
Libertyville, IL 60048
**(Granite) 5/98**

Robert Zamor
(847) 362-5664

**Lombard FD**
255 E. Wilson Avenue
Lombard, IL 60148
**(Canada Brown) 4/99**

Gerry Tonne
(630) 620-5738

**Lyons FD**
4043 Joliet Avenue
Lyons, IL 60534
**(Granite) 12/99**

Gordon Nord Jr.
(708) 447-6655

**Northbrook FD**
740 Dundee Road
Northbrook, IL 60062
**(Gray) 8/96**

James P. Reardon
(847) 272-2141

**Richmond Township FD**
P.O. Box 372
Richmond, IL 60071
**(Gray) 2/97**

Ron Bergsma
(815) 678-2081

**Rolling Meadows FD (2)**
2455 Plum Grove Road
Rolling Meadows, IL 60008
**(Slate) 10/99**

Phillip Burns
(847) 397-3352

**St. Charles FD (2)**
105 N. First Avenue
St. Charles, IL 60174
**(Gray) 7/98**

Larry L. Swanson
(630) 377-4457

**Tinley Park FD**
7801 W. 191st Street
Tinley Park, IL 60477
**(Sedona Red) 9/99**

Kenneth Dunn
(708) 532-5656

**Wheaton FD**
One Fapp Circle
Wheaton, IL 60187
**(Onyx Gray) 9/98**

Dave Fleege
(630) 260-2175

# SYSTEM BULLETIN

## CERAMIC CARPET™ #400 - #425

General Polymers®
A Division of The Sherwin-Williams Company

## Product Description

General Polymers CERAMIC CARPET #400 - #425 are 1/8" systems which incorporate decorative colored quartz aggregates with 100% solids epoxy resins and chemical resistant grout and seal coats to form a protective surfacing system which is aesthetically pleasing, durable and resistant to wear, staining and chemicals.

## Advantages

- Aesthetically pleasing appearance
- Limitless color options
- Durable, wear and slip resistant
- Chemical and stain resistant
- Fiberglass scrim optional for maximum tensile strength and crack isolation
- Optional waterproofing and/or membrane
- -0- VOC, Low odor (with appropriate topcoat)
- Available with an antimicrobial agent

## Uses

- Commercial kitchens (areas where temperature will not exceed 170°F in service)
- Animal Care
- Clean rooms
- Pharmaceuticals
- Locker and restrooms
- Packaging and storage areas

## System Specification

CERAMIC CARPET #400 - #425 FLOORING SYSTEM as manufactured by General Polymers shall consist of 3578 Universal Penetrating Primer as primer, 3561 Epoxy Resin Glaze as binder resin, (5350 Trafficote Filler used for #425), 5900F ESTES Colored Quartz Aggregate, and 3744 NOVO-FLO® Chemical Resistant Epoxy as grout. Different optional seal coats are as follows:
3744 NOVO-FLO Chemical Resistant Epoxy
4608 Polyurethane Enamel
4609S Polyurethane Flex-Cote Satin
3744S NOVO-FLO Chemical Resistant Epoxy Satin
4685 POLY-COTE

## Typical Physical Properties

| | |
|---|---|
| Color | 12 Pre-Blended Standard Colors<br>Custom Color Blends Available |
| Hardness @ 24 hours Shore D<br>ASTM D 2240 | 70/65 |
| Compressive Strength<br>ASTM C 579 | 11,000 psi |
| Tensile Strength<br>ASTM C 307<br>ASTM D 638 | <br>1,800 psi<br>6,000 psi |
| Abrasion Resistance<br>ASTM D 4060, CS-17 Wheel | 70-90 mgs lost |
| Flexural Strength<br>ASTM C 580<br>ASTM D 790 | <br>3,500 psi<br>10,000 psi |
| Adhesion<br>ACI 503R | 350 psi<br>100% concrete failure |
| Flammability<br>ASTM D 635 | Self-Extinguishing<br>over concrete |
| Resistance to<br>Elevated Temperatures<br>MIL-D-3134J | No slip or flow at required<br>temperature of 158°F |

## Installation

General Polymers materials shall only be installed by approved General Polymers contractors. The following information is to be used as a guideline for the installation of the CERAMIC CARPET #400 - #425 SYSTEM. Contact General Polymers Technical Service Department for assistance prior to application.

### *Surface Preparation - General*

General Polymers systems can be applied to a variety of substrates, if the substrate is properly prepared. Preparation of surfaces other than concrete will depend on the type of substrate, such as wood, concrete block, quarry tile, etc. Should there be any questions regarding a specific substrate or condition, please contact General Polymers Technical Service Department prior to starting the project. Refer to Surface Preparation (Form G-1).

### *Application Information*

| | Material | Mix Ratio | Theoretical Coverage Per Coat Concrete | Packaging |
|---|---|---|---|---|
| | 3578 | 2:1 | 250 sq. ft. / gal | 3 or 15 gals |
| **#400 Series** | 3561 | 4:1 | 140-145 sq. ft. / gal | 1.25 -25 gals |
| 1st Broadcast | 5900F | To Excess | .4 lbs / sq. ft. | 50 lb. bag |
| | 3561 | 4:1 | 65-70 sq. ft. / gal | 1.25 - 25 gals |
| 2 nd Broadcast | 5900F | To Excess | .35 lbs / sq ft | 50 lb. bag |
| **#425 Series** | 3561 | 4:1 | 50 sq. ft. / 1 ¼ gal | 1.25 -25 gals |
| | 5350 Trafficote Filler | | 8 lbs / 1.25 gal | 100 lbs |
| | 5900F | To Excess | .6 lbs / sq. ft. | 50 lb. bag |
| Grout Coat | 3744 | 2:1 | 100 sq. ft. / gal | 3 or 15 gals |
| Seal Coat(s) | 3744 | 2:1 | 200 sq. ft. / gal | 3 or 15 gals |
| | 4608 Optional: in place of 3744 | 2:1 | 250 sq. ft. / gal | 3 or 15 gals |
| | 4609S Optional: in place of 3744 | 2:1 | 300 sq. ft. / gal | 3 or 15 gals |
| | 3744S Optional: in place of 3744 | 2:1 | 250 sq. ft. / gal | 3 or 15 gals |
| | 4685 Optional: in place of 3744 | 1:1 | 250 sq. ft. / gal | 2 or 10 gals |

Materials shall be applied via squeegee and/or roller, in compliance with manufacturer's recommended installation procedure.

### *Surface Preparation - Concrete*

Concrete surfaces shall be abrasive blasted to remove all surface contaminants and laitance. The prepared concrete shall have a surface profile equal to 40-60 grit sandpaper.

After initial preparation has occurred, inspect the concrete for bug holes, voids, fins and other imperfections. Protrusions shall be ground smooth while voids shall be filled with a system compatible filler. For recommendations, consult General Polymers Technical Service Department.

### *Temperature*

Throughout the application process, substrate temperature should be 50°F - 90°F. Substrate temperature must be at least 5°F above the dew point. Applications on concrete substrate should occur while temperature is falling to lessen offgassing. The material should not be applied in direct sunlight, if possible.

## Primer
*Mixing and Application*

1. Premix 3578 A (resin) and 3578 B (hardener) separately, using a low speed drill and Jiffy mixer. Mix for three minutes and until uniform, exercising caution not to introduce air into the material.

2. Add 2 parts 3578 A (resin) to 1 part 3578 B (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations.

3. 3578 may be applied via spray, roller or brush. Apply 5-8 mils, evenly, with no puddles. Coverage will vary depending upon porosity of the substrate and surface texture.

4. Wait until primer is tacky (usually 30 minutes), before applying the slurry. If primer is not going to be topped within open time, broadcast silica sand into resin lightly but uniformly and allow to cure overnight.

## First Base Coat (#400 Series)
*Mixing and Application*

1. Premix 3561A (resin) and 3561B (hardener) separately, using a low speed drill and Jiffy mixer. Mix for three minutes and until uniform, exercising caution not to whip air into the material.

2. Add 4 parts 3561A (resin) to 1 part 3561B (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform.

3. Immediately pour the mixed material onto the substrate and pull out using a red rubber squeegee and cross roll at a spread rate of 140-145 square feet per gallon.

4. Allow material to self-level 10-15 minutes. Begin evenly seeding the 5900F into wet resin much the same as grass seed is spread. Granules may be spread by hand or mechanical blower but should be broadcast in such a way that the granules falls lightly into resin without causing the resin to move. Continue broadcasting to excess until the floor appears completely dry.

5. Allow to cure (Cure times vary depending on environmental conditions), sweep off excess granules with a stiff bristled broom. Clean granules can be saved for future use. All imperfections such as high spots should be smoothed before the application of the second broadcast.

## Slurry Coat (#425 Series)
*Mixing and Application*

1. Premix 3561A (resin) and 3561B (hardener) separately, using a low speed drill and Jiffy mixer. Mix for three minutes and until uniform, exercising caution not to whip air into the material.

2. Add 4 parts 3561A (resin) to 1 part 3561B (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform. Add 8 lbs of 5350 Trafficote filler to 1.25 gallons of mixed epoxy and mix thoroughly using a low speed drill and Jiffy mixer for three minutes and until uniform.

3. Immediately pour the mixed material onto the substrate and pull out using a v-notched red rubber squeegee and cross roll at a spread rate of 50 square feet per gallon.

4. Allow material to self-level 10-15 minutes. Begin evenly seeding the 5900F into wet resin much the same as grass seed is spread. Granules may be spread by hand or mechanical blower but should be broadcast in such a way that the granules falls lightly into resin without causing the resin to move. Continue broadcasting to excess until the floor appears completely dry.

5. Allow to cure (Cure times vary depending on environmental conditions), sweep off excess granules with a stiff bristled broom. Clean granules can be saved for future use. All imperfections such as high spots should be smoothed before the application of the grout coat.

## Second Broadcast (#400 Series)
*Mixing and Application*

1. Premix 3561A (resin) and 3561B (hardener) separately, using a low speed drill and Jiffy mixer. Mix for three minutes and until uniform, exercising caution not to whip air into the material.

2. Add 4 parts 3561A (resin) to 1 part 3561B (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform.

3. Immediately pour the mixed material onto the substrate and pull out using a v-notched red rubber squeegee and cross roll at a spread rate of 65-70 square feet per gallon.

4. Allow material to self-level 10-15 minutes. Begin evenly seeding the 5900F into wet resin much the same as grass seed is spread. Granules may be spread by hand or mechanical blower but should be broadcast in such a way that the granules falls lightly into resin without causing the resin to move. Continue broadcasting to excess until the floor appears completely dry.

5. Allow to cure for 24 hours, sweep off excess granules with a stiff bristled broom. Clean granules can be saved for future use. All imperfections such as high spots should be smoothed before the application of the seal coat.

NOTE: 5900F Granule distribution is critical to the success if the application. The decks finished appearance depends on the manner in which the granules have been applied. In grass seed like fashion, allow the granules to fall after being thrown upward and out. **DO NOT THROW DOWNWARD AT A SHARP ANGLE USING FORCE.**

## Grout Coat

### *Mixing and Application*

1. Premix 3744A (resin) and 3744B (hardener) separately, using a low speed drill and Jiffy mixer. Mix for three minutes and until uniform, exercising caution not to introduce air into the material.

2. Add 2 parts 3744A (resin) to 1 part 3744B (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations. **Take care not to puddle materials and insure even coverage.**

3. Apply 3744 using flat trowel or squeegee and backroll with 1/4" nap, phenolic core roller. Apply at a spread rate of 100 square feet per gallon evenly with no puddles making sure of uniform coverage. Two coats may be required.

4. Allow to cure (Cure times vary depending on environmental conditions).

## Seal Coat 3744

### *Mixing and Application*

1. Premix 3744A (resin) and 3744B (hardener) separately, using a low speed drill and Jiffy mixer. Mix for three minutes and until uniform, exercising caution not to introduce air into the material.

2. Add 2 parts 3744A (resin) to 1 part 3744B (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations. **Take care not to puddle materials and insure even coverage.**

3. Apply 3744 using flat trowel or v-notched trowel and backroll with 1/4" nap, urethane roller. Apply at 200 square foot per gallon evenly with no puddles making sure of uniform coverage.

4. Allow to cure 24 hours minimum before opening to traffic.

## Seal Coat 4608 (in place of 3744)

### *Mixing and Application*

1. Premix 4608A (resin) using a low speed drill and Jiffy mixer. Mix for three minutes and until uniform, exercising caution not to introduce air into the material.

2. Add 2 parts 4608A (resin) to 1 part 4608B (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations. **Take care not to puddle materials and insure even coverage.**

3. Apply 4608 using 1/4" nap, urethane roller. Apply at a spread rate of 250 square foot per gallon evenly with no puddles making sure of uniform coverage.

4. Allow to cure 24 hours minimum before opening to traffic.

**NOTE: Adequate ventilation and proper safety equipment is required when using 4608 Polyurethane.**

## Seal Coat 4609S (in place of 3744)

### *Mixing and Application*

1. Premix 4609SA (resin) using a low speed drill and Jiffy mixer. Mix for three minutes and until uniform, exercising caution not to introduce air into the material.

2. Add 2 parts 4609SA (resin) to 1 part 4609SB (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations. **Take care not to puddle materials and insure even coverage.**

3. Apply 4609S using 1/4" nap, urethane roller. Apply at a spread rate of 250 square feet per gallon with no puddles making sure of uniform coverage.

4. Allow to cure 24 hours minimum before opening to traffic.

**NOTE: Adequate ventilation and proper safety equipment is required when using 4609S Polyurethane Flex-Cote Satin.**

## Seal Coat 3744S (in place of 3744)

*Mixing and Application*

1. Premix 3744SA (resin) and 3744SB (hardener) separately, using a low speed drill and Jiffy mixer. Mix for three minutes and until uniform, exercising caution not to introduce air into the material.

2. Add 2 parts 3744SA (resin) to 1 part 3744SB (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform.

3. Apply 3744S using a short nap roller at a spread rate of 250 sq. ft. per gallon to yield 6 mils WFT. An even application of 3744S is essential for gloss consistency. Use wet mil gauge to insure application is at 6 mils WFT. Excess millage will result in high gloss.

4. Allow to cure overnight before opening to traffic.

**Note: Epoxy materials will appear to be cure and "dry to touch" prior to full chemical cross linking. Allow NOVO-FLO 3744S to cure for 7-14 days prior to exposure to water or other chemicals for best performance.**

## Seal Coat 4685 (in place of 3744)

*Mixing and Application*

1. Premix 4685A (resin) using a low speed drill and Jiffy mixer. Mix for three minutes and until uniform, exercising caution not to introduce air into the material.

2. Add 1 part 4685A (resin) to 1 part 4685B (hardener) by volume. Mix with low speed drill and Jiffy mixer for three minutes and until uniform. To insure proper system cure and performance, strictly follow mix ratio recommendations. **Take care not to puddle materials and insure even coverage.**

3. Apply 4685 using 1/4" nap, urethane roller. Apply at a spread rate of 250 square foot per gallon evenly with no puddles making sure of uniform coverage.

4. Allow to cure 24 hours minimum before opening to traffic.

**NOTE: Adequate ventilation and proper safety equipment is required when using 4608 Polyurethane.**

## Cleanup

Clean up mixing and application equipment immediately after use. Use toluene or xylene. Observe all fire and health precautions when handling or storing solvents.

## Safety

MSDS (Material Safety Data Sheets) must be read and understood by personnel responsible for supervision and installation of General Polymers materials. In particular, PPI (Personal Protection Index) data should be consulted to help insure safe handling. All applicable federal, state, local and particular plant safety guidelines must be followed during the handling and installation and cure of these materials.

Safe and proper disposal of excess materials shall be done in accordance with applicable federal, state, and local codes.

## Material Storage

Store materials in a temperature controlled environment (50°F - 90°F) and out of direct sunlight.

Keep resins, hardeners, and solvents separated from each other and away from sources of ignition. One year shelf life is expected for products stored between 50°F - 90°F.

## Maintenance

Occasional inspection of the installed material and spot repair can prolong system life. For specific information, contact General Polymers Technical Service Department.

## Shipping

- Destinations East of the Rocky Mountains are shipped F.O.B. Cincinnati, Ohio.

- Destinations West of the Rocky Mountains are shipped F.O.B. Sylmar, California.

For specific information relating to international shipments, contact your local General Polymers Representative.

## Warranty

The sale of General Polymers, A Division of The Sherwin-Williams Company, products are governed by the General Polymers' Standard Terms and Conditions of Sale. General Polymers has no knowledge or control concerning buyer's use for the product nor over the quality of the concrete or substrate to which they are applied. General Polymers assumes no responsibility for any loss or damage resulting from the handling or use of the products by the buyers. General Polymers makes the following LIMITED WARRANTY that its product have been supplied free from manufacturing defects, and will conform to General Polymers manufacturing standards. Technical data furnished by General Polymers is true and accurate to the best of our knowledge; however, no guarantee of accuracy is given or implied. This Limited Warranty shall not apply in the case of improper installation, improper substrate construction, damage beyond the scope and protection of the products, exposure of the products to solvents and/or higher concentrations of acids than that for which the products are designed and loss of bond due to hydrostatic pressure, vapor pressure, capillary action or moisture from within, under or adjacent to the concrete surface.

GENERAL POLYMERS' LIABILITY SHALL NOT EXCEED REPLACEMENT OF OR RETURN OF THE PURCHASE PRICE FOR THE PRODUCTS WHICH IT MAY SELL WHICH MAY PROVE TO BE DEFECTIVE UNDER NORMAL USE AND SERVICE WITHIN ONE YEAR FROM DATE OF SALE AND WHICH UPON EXAMINATION BY GENERAL POLYMERS SHALL DISCLOSE, TO GENERAL POLYMERS' SATISFACTION, TO BE DEFECTIVE. IN NO EVENT SHALL GENERAL POLYMERS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, BUYERS LOSS OF MATERIAL OR PROFITS, INCREASED EXPENSE OF OPERATION, BODILY INJURY, LOSS OF USE OF PROPERTY, OR DOWNTIME. GENERAL POLYMERS MAKES NO IMPLIED WARRANTIES OF MERCHANTABILITY OF FITNESS FOR A PARTICULAR PURPOSE. THE BUYER HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.

This Limited Warranty supersedes any other warranty or other representation, whether written or oral, hereto made between parties.

General Polymers®
A Division of The Sherwin-Williams Company

Cincinnati, OH
(513) 761-0011
(800) 543-7694

WEBSITE: www.generalpolymers.com



Sylmar, CA
(818) 365-9261
(800) 624-5041

# PROPOSAL

## DURABOND FLOORING

4707 River dr.
lisle il. 60532
(630) 969-7568

PROPOSAL NO. 32228
SHEET NO. 2
DATE 2/9/01

PROPOSAL SUBMITTED TO:

NAME Fire House
ADDRESS 6701 Main st.
Downers Grove Il. 60516
PHONE NO. 434-5987

WORK TO BE PERFORMED AT:

ADDRESS same
DATE OF PLANS
ARCHITECT

We hereby propose to furnish the materials and perform the labor necessary for the completion of

1. This floor will be prepared by mechanical grinding method.
2. The floor will be resurfaced with system # 300
3. The floor area is to be dry and clear of liquid, spillages, traffic and obstruction during preparation and curing.
4. Work will be performed at a time that will create a minimal disruption of your normal work routine.
5. Customer will supply trash containers for all debris during the course of the job.

Note: guarantee on this flooring is for 5 years against delamination and wear through only from the date after completion. It does not guarantee against delamination due to moisture vapor transmission heavy abuse, contamination, or heavy impact.

cost 4200 sq ft @ $5.25 double seed per sq ft $ 22,050.00

color: ? texture: Non slip

All material is guaranteed to be as specified, and the above work to be performed in accordance with the drawings and specifications submitted for above work and completed in a substantial workmanlike manner for the sum of

twenty-two thousand and fifty 00/100 Dollars ($ 22,050.00 )

with payments to be made as follows.

1/3 down $ -0-

bal due upon completion $ 22,050.00

Respectfully submitted Durabond seamless flooring Inc.

Per

Any alteration or deviation from above specifications involving extra costs will be executed only upon written order, and will become an extra charge over and above the estimate. All agreements contingent upon strikes, accidents, or delays beyond our control.

any guarantee if given, will be deemed null and void if bills are not paid with quoted terms, plus pay lawyers and court cost.

Note — This proposal may be withdrawn by us if not accepted within _____ days.

ACCEPTANCE OF PROPOSAL

The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payments will be made as outlined above.

Signature X

Date _____ Signature _____

**STONHARD**

December 1, 2000

Stonhard, Inc.
6400 Shafer Court
Suite 750
Rosemont, IL 60018
847/292-4800
FAX: 847/292-0513

Mr. Paul Segalla
DOWNERS GROVE FIRE DEPARTMENT #5
6701 Main Street
Downers Grove, IL 60516

RE: Resinous Epoxy Flooring

Dear Mr. Segalla:

Thank you, for the opportunity to submit Stonhard's proposal for the epoxy flooring for your Apparatus Bays.

Stonhard and I are bidding Stonshield SLT.

**STONSHIELD SLT:**

Stonshield SLT is a nominal 3/32 - 1/8"/2-3mm seamless, free flowing, decorative, chemically resistant, easy to clean, epoxy flooring system engineered with a textured surface for slip resistance in commercial applications, light manufacturing areas, washrooms, shower areas, kitchen and public space, as well as, other areas requiring a durable flooring system.

**NEEDS AT DOWNERS GROVE FIRE DEPARTMENT:**

1. Chemical Resistance - The ability to withstand spillages of oils, gas, grease, and cleaning solutions, to name a few.
2. Maintenance Free - A floor system that will not require resurfacing every few years.
3. Durability - Wear resistance for many years under heavy vehicle load and heavy foot traffic.
4. Joint Integrity - Able to withstand movement from expansion/contraction.
5. Cleanability - A seamless flooring system which will not trap dirt and bacteria.
6. Aesthetically pleasing.
7. Single source supplier to take responsibility for all aspects of floor manufacture, as well as installation.
8. Slip Resistance - Reducing the risk of injuries caused by slip-falls.

**BENEFITS OF STONSHIELD:**

1. Long Term Solution - The application of Stonshield is often treated as a capital investment rather than a recurring expense. Our reference list will show Stonhard floors that are 10 to 20 years old.

2. Epoxy System - Approximately two times the strength of concrete.

3. Smooth Surface - Non-porous, non-flaking surface provides an easy to clean floor.

4. Stonshield will not break down under traffic at joints.

5. Available in several attractive decorative tweed colors.

6. Stonhard manufactures all of our materials and takes responsibility for our installations. In this way, we can quickly respond to customer needs and take full responsibility for your flooring applications.

**PROPOSED SYSTEM:**

1. Stonshield SLT is a three component, 100% solids decorative epoxy flooring system. Applied as a 1/8" overlayment. Stonshield cures to a monolithic, durable, easy to clean, chemical resistant and slip resistant surface.

2. All joints will be cut and filled with a flexible, traffic bearing sealant. Stonflex MP7 is an epoxy-based material, which allows for minor joint movement.

**INSTALLATION:**

The following procedures are standard to all of our installations:

1. Substrate Preparation – Mechanically remove the existing coating and prepare the substrate mechanically. Stonhard's flooring systems will follow the contour of the existing concrete.

2. Mixing - All material is pre-weighed and pre-packaged in single easy to manage batches to eliminate on-site mixing errors. No on-site weighing or volumetric measuring is allowed, providing a consistent floor from start to finish.

3. Surface Priming - Prepared substrate shall be primed using Stonhard's Penetrating Primer to ensure a permanent mechanical bond to the concrete.

4. Immediately, Stonhard will broadcast Stonshield silica quartz aggregate into the wet primer.

5. After a 6-8 hour cure, Stonshield undercoat will be squeegee and roller applied and Stonshield Silica quarts aggregate will be evenly distributed utilizing Stonhard's broadcaster.

6. After a 6-8 hour cure, the area will be swept and vacuumed and the final sealer coat of Stonshield sealer will be applied. Stonshield sealer will improve the aesthetics of the floor, while also improving abrasion, chemical resistance and cleanability.

7. Expansion and control joints shall be honored to enhance the performance of the floor. They will receive Stonflex MP7, a flexible sealant.

**INSTALLATION INVESTMENT**

Stonhard to install Stonshield SLT for a single source, turnkey installation investment of $18,000.00, based on 4,140 square feet. Cove base has not been included.

Stonclad GS/Stonkote HT4 can be installed for an installation investment of $20,500.00.

**PRODUCT DESCRIPTION:**

Stonclad GS/Stonkote HT4 is a nominal 3/16" thick epoxy flooring system formulated as a general service epoxy system for applications requiring superior impact and abrasion resistance with good chemical resistance.

**WARRANTY:**

The parties acknowledge that in the event repairs need to be performed to the contract work, Stonhard's liability shall be limited to furnishing the labor and materials necessary to reinstall the defective areas. Unless otherwise agreed in writing signed by an authorized agent of Stonhard, Stonhard's obligation to furnish the materials necessary to reinstall the defective areas shall terminate two (2) years after the completion of the original contract work. Stonhard's obligation to furnish the labor necessary to reinstall the defective areas shall terminate two (2) years after the completion of the original contract work. Stonhard shall not be liable for damages to the contract work resulting from ordinary wear and tear, gouging, impact, failure of the customer to protect the floor from damage caused by the customers workmen or subsequent contractors, the occurrence of reverse impact or the effects of osmotic or hydrostatic pressure or moisture vapor transmission. The parties further acknowledge that Stonhard shall not be responsible for any consequential or incidental damages resulting from any breach of warranty.

**SPECIAL TERMS AND CONDITIONS:**

A. Stonhard's installations crews will be in strict compliance with the customer's safety rules and regulations.

B. Prices quoted are based on non-union labor.

C. Stonhard offers this quote based on Standard General Terms and Conditions attached to this proposal.

D. This investment is based on one (1) mobilization.

E. Stonhard flooring system will follow the contour of the existing substrate. Patching or sloping of the floor will incur an additional investment.

**ON-SITE REQUIREMENTS**

Stonhard asks the owners to provide the following:

1. Areas to be free and clear of all traffic and other trades.
2. Areas to be clean, dry and at least 60° Fahrenheit.
3. 3 phase hookup at each area, 440v, 30 amps or 220v, 60 amps. 110v outlets.
4. Trash dumpsters - Stonhard will consolidate boxes at a predesignated area to be disposed of by the General Contractor.
5. The areas must have finished lighting in order to install the overlayment.

In addition to Stonhard's excellent line of permanent flooring solutions, Stonhard is proud of the fact that we provide single source responsibility. Stonhard takes full responsibility from raw materials to installed systems. We not only manufacture our own products, we install them. Over 300 project engineers and 175 installation crews worldwide make sure each application meets our high standards of quality. You deal directly with Stonhard from start to finish. You are provided with a single source warranty on both product and workmanship.

I will review this information with your in the immediate future. In the meantime should you have any further questions or concerns, please contact me at 1-800-854-0340.

Sincerely,

Mike Hayward
Commercial Sales

Cc: Todd Gore

Attachment

STONHARD

## GENERAL TERMS AND CONDITIONS

The following terms and conditions are hereby made a part of this Agreement.

1. RESPONSIBILITIES OF STONHARD:
   - A. Stonhard has visually inspected the project site prior to the commencement of work and agrees to the contract work based on the existing nature of the project site as it appears and is represented by the Customer. In the even that concealed conditions are revealed which would materially change the nature of the contract work, Stonhard is entitled to cease work until such time as the contract sum has been adjusted equitably to compensate for such change.
   - B. Stonhard shall keep the premises free from accumulation of waste material or rubbish which results from the execution of its work. In no event shall Stonhard be responsible for any unclean conditions caused by others.
   - C. Upon request by the Customer, Stonhard will furnish certificates of Workman's Compensation Insurance and Liability Insurance.
   - D. Stonhard shall make all necessary arrangements to have any excess Stonhard products picked up after completion of the contract work.

2. RESPONSIBILITIES OF CUSTOMER:
   - A. Customer has conducted an investigation of the project site prior to the commencement of work and represents that the existing nature and condition of the project site is as it appears and that there are no concealed conditions which would materially change the nature of the contract work.
   - B. Customer shall have the project site swept clean and made free of all obstructions, and shall remove all food items, organic materials and other products stored at or near the project site to prevent any contamination or spoilage that may occur and shall make the project site available for Stonhard at the agreed upon date and time in which the contract work is to commence.
   - C. Customer shall provide Stonhard, at no charge, all necessary utility services required for the proper execution of the contract work. The Customer shall further provide Stonhard with a dumpster or other reasonable alternative in which Stonhard may dispose of its waste and rubbish.
   - D. Customer shall provide and maintain a minimum continuous temperature of 60° Fahrenheit at the floor level of the project site and provide a similarly suitable warm and dry area for storage of Stonhard's products and equipment during the course of the work.
   - E. Customer shall insure that no other work or tasks will be contemporaneously performed in the work area by the Customer, other trades or subcontractors once Stonhard has commended performance of its work.
   - F. Customer, upon completion of work by Stonhard, shall protect Stonhard's work from damage caused by the Customer, their workmen or subsequent contractors.

3. PAYMENTS: Please see Payment Terms' section on Installation Agreement.

4. CANCELLATION CHARGES: Any cancellation of a confirmed order will result in a cancellation fee of not less than 15% of the contract amount. Payment terms will be due Net 10 Days after receiving written notice of cancellation. If written notification is not given to Stonhard at least 7 days prior to commencement of work, Stonhard will be entitled to an additional re-scheduling fee of not less than 10% of the contract amount.

5. LIMITATION OF LIABILITIES: The parties acknowledge that in the event repairs need to be performed to the contract work, Stonhard's liability shall be limited to furnishing the labor and the materials necessary to reinstall the defective areas. Unless otherwise agreed in writing signed by an authorized agent of Stonhard, Stonhard's obligation to furnish the labor and materials necessary to reinstall the defective areas shall terminate one (1) year after the completion of the original contract work. Stonhard shall not be liable for damages to the contract work resulting from ordinary wear and tear, gouging, impact, failure of the Customer to protect the work as outlined in Section 2.F, the occurrence of reverse impact or the effects of osmotic or hydrostatic pressure or moisture vapor transmission. The parties further acknowledge that Stonhard shall not be responsible for any consequential or incidental damages resulting from any breach of warranty.

6. EFFECT OF DEFAULT: In the event of a default by the Customer of any of the covenants or conditions of this Agreement, Stonhard shall be entitled to the following remedies to all other rights and remedies afforded by law:
   A. **Right To Stop Work** - Stonhard shall have the right to stop work if any payments due are not made as provided under this Agreement.
   B. **Cost of Performance** - If Stonhard is entitled to stop work as outlined in subparagraph (A) above, it shall have the right to bill the Customer for the work rendered up to the date of the stoppage and for materials shipped to the project site.
   C. **Additional Work** - Any additional costs to Stonhard resulting from failure of the Customer to provide site conditions as outlined in Sections 2.A, 2.B, 2.C, 2.D, 2.E. and 2.F shall be paid by the Customer.
   D. **Interest on Unpaid Balances** - In the event any payments due hereunder become in default, Customer agrees that any and all such sums shall accrue interest at the rate of 12 percent (12%) per annum.
   E. **Attorney's Fees** - If Stonhard is required to initiate legal action to collect any amounts due to owing or to foreclose on any liens filed on the work, such costs and fees that Stonhard may recover include any and all prelitigation expenses, including attorney's fees incurred in attempting to recover said amounts.

7. GOVERNING CLAUSE: This Agreement shall be governed by and construed in accordance with the laws of the State of New Jersey.

8. ENTIRE AGREEMENT: This Agreement shall constitute the entire Agreement between the parties and the parties acknowledge that there are no other verbal or written Agreements, understandings or customs affecting the Agreement.

9. AUTHORIZED AGENCY: All contracts and purchase orders must be signed by an authorized agent of Stonhard, Inc. This may be accomplished through a Division Office or Corporate Headquarters. No other parties engaging in such contracts or purchase orders will be acting as an agent for Stonhard, Inc.