

Special Coatings for Sheet Vinyl, Linoleum, Terrazzo, Rubber and VCT

## Sustainability- Air - Soil - Water

#### VOC Emission's- Pro-Shine Systems vs. Conventional Floor Care Programs

**Goal-** To compare VOC's released in an application of Connfield Floor's Pro-Shine System vs. Conventional Floor Finish.

#### **Report Perimeters-**

Square Footage- 10,000 sq ft

Number of coats recommended by Conventional Floor Finish, bare floor application 5 Number of coats in a Pro-Shine System, 1 Pre-Pro and 1 Pro-Shine

#### Reported VOC's

Conventional Floor Finish – 1.0% VOC; 8.59 lbs/gal; 2000 sqft/gal coverage (published SDS)

Pro-Shine System - Pre-Pro 909901 – 0.12% VOC; 8.55 lbs/gal; 2000 sqft/gal coverage

Pro-Shine 909902 – 0.17% VOC; 9.04 lbs/gal; 800 sqft/gal coverage

#### **Conventional Floor Finish (SDS Information)**

$$\frac{8.59 \, lbs}{1 \, gal} * \frac{1.0 \, lbs \, VOC}{100 \, lbs \, Floor \, Finish} * \frac{1 \, gal}{2000 \, sqft} * \mathbf{10,000} \, sqft * \mathbf{5} \, coats =$$

#### 2. 15 lbs VOC released when applied to 10,000 sq ft

#### **Pro-Shine System**

Pre-Pro 
$$\frac{8.55 \ lbs}{1 \ gal} * \frac{0.12 \ lbs \ VOC}{100 \ lbs \ Pre-Pro} * \frac{1 \ gal}{2000 \ sqft} * 10,000 \ sqft = 0.05 \ lbs \ VOC \ released$$
 Pro-Shine 
$$\frac{9.04 \ lbs}{1 \ gal} * \frac{0.17 \ lbs \ VOC}{100 \ lbs \ Pro-Shine} * \frac{1 \ gal}{800 \ sqft} * 10,000 \ sqft = 0.19 \ lbs \ VOC \ released$$

#### Total -0.05 lbs +0.19 lbs =0.24 lbs VOC released in project

Pro-Shine Systems are non-buff systems. Buffing can anatomize possible pathogens on the surface of the floor.

NOTE- The report above is for one application per product. It does not take into account additional VOC's emitted while maintaining a conventional floor finish program i.e. recoats and surface repairs plus the UHS buffing chemicals necessary to sustain a Floor Finish program compared to the average 18 month life a single Pro-Shine System application.





## **Plastic Container and Floor Pad Waste Comparisons**

Pro-Shine Coating Systems can reduce the use of plastic gallon containers by as much as 80%. The use of corrugated packaging is also reduced.

Conventional floor care programs require 10-1 gallon containers to maintain 2000 sq feet of flooring annually.

A Pro-Shine floor care program requires 2.5- 1 gallon containers to maintain 2000 sq feet of flooring annually.

Pro-Shine Systems are no buff systems. The only pads necessary are white scrubber pads. Buff pads, top scrub pads and in some cases even black strip pads can be eliminated. Buffing chemicals are eliminated as well.

For every 10 gallons of Conventional Floor Care finish, 8 extra gallons of liquid chemicals are produced.







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#### **ROI** Monitoring at Location A- 600 bed hospital

In a recent audit, our ROI Cost Calculator was used to determine savings over the last 5 years. Over a 5 year period 1984 gallons of Pro-Shine was delivered to this location coating a total of 1,587,200 sq ft.

### Total savings over 5 years- \$4,971,523

Download our ROI Cost Calculator under the tab <a href="http://connfieldfloors.com/Document\_Library.html">http://connfieldfloors.com/Document\_Library.html</a>

| Connfield Floors Inc.  UV Cured Coatings for Vinyl - Rubber - Linoleum - Terrazzo  |                                 |               |           |        |               |                          |                         |                  |  |
|--|---------------------------------|---------------|-----------|--------|---------------|--------------------------|-------------------------|------------------|--|
| Pro-Shine Coating Cost Calculator - Results  | MAINTENANCE COST                | Conventional  |           |        |               | Pro-Shine Coating System |                         |                  |  |
|  | Task                            | Labor Product |           |        | Labor Product |                          |                         |                  |  |
| Based on the following input for 1,587,200 square feet of flooring:  | Initial Application             | \$            | 125,706   | \$     | 119,040       | \$                       | 104,755                 | \$ 878,991       |  |
|  | Burnishing                      | \$            | 3,026,261 |        | N/A           |                          |                         | -                |  |
| Floors are burnished 260 times per year.   | Scrub & Recoat                  | \$            | 1,331,439 | _      | 1,190,400     |                          | -                       | -                |  |
| Floors are scrubbed and re-coated an average of 3 times per year.  Floors are stripped an average of 1 time(s) per year.   | Strip & Refinish<br>Restoration | \$            | 846,771   | \$     | 694,400       | \$                       | 279,347                 | \$ 1,099,401     |  |
| ., ., ., ., ., ., ., ., ., ., ., ., ., .   |                                 | _             |           |        |               | _                        |                         | 1,000,101        |  |
| And the following cost parameters:   | Totals                          | \$            | 5,330,177 | \$     | 2,003,840     | \$                       | 384,102                 | \$ 1,978,392     |  |
| Floor Care Labor Cost/Hour \$ 22.00  | Total Costs                     | \$            | 7,334,017 | Conve  | entional      | \$                       | 2,362,494               | Pro-Shine System |  |
| Pro-Shine & Pre-Pro cost/gallon         \$ 442.00           Conventional finish cost/gallon         \$ 15.00           Conventional stripper cost/gallon         \$ 12.50  | SQUARE FOOT COST                |               | Conven    | tional |               |                          | Pro-Shine C             | oating System    |  |
|  | Task                            |               | Labor     | Р      | Product       |                          | Labor                   | Product          |  |
|  | Initial Application             | \$            | 0.079     | \$     | 0.075         | \$                       | 0.066                   | \$ 0.554         |  |
| Savings in floor care costs over 5 years using our Pro-Shine System:   | Burnishing                      | \$            | 1.907     |        | N/A           |                          | -                       | -                |  |
| 00.00/   | Scrub & Recoat                  | \$            | 0.839     | -      | 0.750         |                          | -                       | -                |  |
| Labor cost is expected to decline by: 92.8% or \$4,946,07  | Strip & Refinish Restoration    | \$            | 0.534     | \$     | 0.438         | \$                       | 0.176                   | \$ 0.693         |  |
| For a total estimated cost savings of: 67.8% or \$4,971,52   |                                 |               |           |        |               | φ                        | 0.176                   | φ 0.093          |  |
| Total communications savings of an artist savings of a sa | Totals                          | \$            | 3.358     | \$     | 1.263         | \$                       | 0.242                   | \$ 1.246         |  |
|  |                                 |               |           |        |               |                          |                         |                  |  |
| UV Curing Machine (\$.18 per sq2 for first 50,000 sq2)   |                                 |               |           |        |               |                          |                         |                  |  |
| UV Curing Machine (\$.18 per sq2 for first 50,000 sq2)  Total savings using Pro-Shine Coating System \$ 4,962,623  | Total Sq Ft Costs               | \$            | 4.621     | Conve  | entional      | \$                       | 1.488                   | Pro-Shine System |  |
|  | Total Sq Ft Costs               | \$            | 4.621     | Conve  | 1             | T                        | 1.488<br>to Instruction |                  |  |





## **Pro-Shine Implementation Considerations**

Estimated annual in house floor care costs for conventional floor care programs can range between \$4.50 and \$6.00 a sq ft. Pro-Shine Systems application costs range between \$1.35 and \$2.00 per square foot. The life of an application averages 18 months.

To maximize savings and utilize FTE's at their full potential, we suggest using certified contractors to renovate and apply Pro-Shine in medical locations with 200 beds or less. For those locations with 200+ beds a combination of contractors and in house staff efforts seems to be a good fit.

Trained contractors are readily available to provide labor, equipment and product at costs between \$1.35 and \$2.00 per square foot depending on the situation. Closed areas, flooring with a urethane that needs removed, new remodels and buildouts etc. all are pricing considerations for contractors.





# 2 Part Air Dry and UV Cured Urethane Coatings Compared to Pro-Shine Coating Systems

Pro-Shine **is not** a urethane based formulation. Most UV cured coatings are. Pro-Shine Systems are water based containing 44% solids.

2 part air dry and UV cured urethane based coatings are difficult to remove when renovation is necessary. Downtime in critical care areas can be problematic to patient care. Safety to employees and staff who use special strippers promoted to remove 2 part urethanes are in question.

Our Pro-Shine System is formulated to give our clients optimum performance without concerns regarding damage to flooring and extensive labor. Our Pro-Release *PLUS* floor finish and coating removers are designed to remove our systems with easy using conventional stripping methods. Environmental impact to employees, staff and patients is minimal.

