



**STONEWORKS**  
THE ART OF FLOOR CARE

## TABLE OF CONTENTS

<b>1</b>	GEOLOGY & STONE IDENTIFICATION
<b>2</b>	QUARRYING & FABRICIATION
<b>3</b>	STONE FLOOR REFINISHING/POLISHING
<b>4</b>	PROCEDURES & TECHNIQUES
<b>5</b>	STONE CLEANING
<b>6</b>	STAIN REMOVAL
<b>7</b>	TROUBLESHOOTING
<b>8</b>	STONE MAINTENANCE
<b>9</b>	EQUIPMENT
<b>10</b>	BIDS & ESTIMATES
<b>11</b>	MARKETING
<b>12</b>	FAQ'S-FREQUENTLY ASKED QUESTIONS
<b>13</b>	FORMS / APPENDIX



STONEWORKS

# TABLE OF CONTENTS

## 1. Geology and Stone Identification

Introduction	1-1
Igneous Rocks	1-2
Sedimentary Rocks	1-4
Metamorphic Rocks	1-5
Mineral Identification	1-6
Mohs Scale of Hardness	1-8
Field Identification	1-9
The Name Game	1-11
Look-A-Likes	1-13
Other Stone Types	1-17

## 2. Quarrying & Fabrication

Quarrying Basics	2-2
Stone Surface Finishes & Textures	2-4

## 3. Stone Floor Refinishing & Polishing

Three Basic Steps	3-1
Grit Size	3-4
Abrasive Types	3-5
Achieving a Polished Finish	3-8
Crystallization	3-10
Powder Polishing	3-12
Stone Floor Restoration	3-16

## 4. Procedures & Techniques

M-01: Marble Floor Refinishing procedures for soft marble	4-2
M-01H: Marble Floor Honing Procedure Without Lippage Removal	4-7
M-01P: Marble Polishing Procedure for Soft Marble	4-11
C-01: Crystallization Procedure for Marble	4-13
M-01S: Marble Polishing Procedures for Green and Hard Marbles	4-15
DP-01: Dry Polishing Procedure	4-19
MG-01A&B: Marble/Granite Combination Refinishing Procedure	4-21
G-01: Granite Floor Refinishing Procedure	4-31
L-03: Limestone Refinishing To Remove "Browning"	4-36



R-01: Repair procedure for filling holes in stone surfaces (Interior only)	4-38
TF-01: Travertine Filling Procedure	4-40
TR-01: Terrazzo Refinishing & Polishing	4-41
SL-04: Cleaning & Protection of Slate Flooring	4-45
M-01T: Marble Vanity & Furniture Tops refinishing & Polishing Procedure	4-47
S-01: General Application of Penetrating Sealers (Impregnators)	4-50
RT-01: Removal and Replacement of Stone Floor Tile	4-51
GR-01: Grout Removal & Replacement on Stone Flooring	4-53
Techniques	4-54
Edges	4-54
How Long Does Each Abrasive Need to be Worked	4-58
How Much Weight is Needed	4-59
How Many Diamond Pads are Best	4-59
How Much Water is Necessary	4-60
What is the Optimum Speed for my Floor Machine	4-60
How Fast Should I Move the Machine	4-61

## 5. Stone Cleaning

Cleaning Chemistry Basics	5-1
Understanding pH	5-3
Water & Solvent Based Cleaners	5-5
How Stone Cleaners Work	5-7
When & How to Clean Stone Surfaces	5-9

## 6. Stain Removal

Stain Identification	6-4
Stain Types	6-9
What is a Poultice	6-11
Removing the Stain	6-12
Unknown Stain Removal Procedure	6-17
Sealing Stone Surfaces	6-20
FAQ – Frequently Asked Questions about Impregnators	6-26
Stain Removal Chart	6-33

## **7. Troubleshooting & Problem Solving**

Common Stone Problems	7-6
Worn, Dull & Scratched Stone	7-6
Lippage	7-7
Dull, Clouded Sports – Acid Etching	7-7
Efflorescence	7-8
Flaking	7-8
Cracking	7-9
Holes and Pits	7-9
Spalling	7-10
Stuns or Crystal Fractures	7-10
Water Rings and Spots	7-11
Yellowing	7-11
Swirls	7-13
Sticky and/or Clouded Surface	7-13
Plastic Wavy Shine	7-14
Dimpled Appearance (Orange Peel)	7-14
Warping	7-14
Dull and Halo Edges	7-15
Grout Problems	7-15
Using the Job Survey	7-17
The Field Guide Cheat Sheet	7-19

## **8. Stone Maintenance**

Why Maintenance	8-1
Restoration or Maintenance	8-2
Maintenance Options	8-3
Stone Maintenance Program	8-5
Stone Maintenance Basics	8-6
Daily Maintenance	8-10

## **9. Equipment**

Floor Machines	9-2
Hand Held Machines	9-7
Wet Vacuum	9-8
Specialty Equipment	9-9

## **10. Bids and Estimates**

The Bidding Process	10-2
The Low Bid Scenario	10-7
Stone Restoration Bid Worksheet	10-8

## **11. Marketing**

Selling Your Services	11-1
Lead Generation	11-3
News Releases	11-4
No Job Too Big/Small	11-9
Referrals	11-13
Direct Mail	11-20
Salesmanship	11-33
Example News Release / Brochure	11-39

## **12. FAQ – Frequently Asked Questions** 12-1

## **13. Forms / Appendix**

Survey Form
Appendix

