PALLMANN TRAINING CLASS
Welcome!

We thank you for your time and efforts to travel to Denver for this school
Helpful Reminders

- Drink plenty of water—we are above 5,000 feet
- Water purifier to refill bottles
- Bathrooms located in Training Center
- “No Smoking” in building
- Phones on silent (but…if you have to take a call please do)
- Any questions please ask!
- Have Fun!!
Introduction of PALLMANN
(Video)
Uzin Utz
NORTH AMERICA
Founded in 1911

1980’s—2000’s purchased other manufactures

Publicly Traded on the German Stock Exchange (DAX)

Fourth Generation Owned

Focus Products: Adhesives, Sub Floor Prep, Moisture Mitigation
Wolff Tools

Over 2000 SKU’s in stock

History dates back well over 50 years

Parts are manufactured in Germany
Meet The PALLMANN Team!
Goals Of Training Class

• Educate and Demonstrate all of the PALLMANN product range
  • System based product solutions
  • Sub-Floor Prep – Care and Maintenance

• Networking Opportunity
  • Over 220 years of experience from the PALLMANN team
  • How much experience is in the room?
  • Make some new friends!
We Are Social Too!

@pallmannusa

pallmann_usa

pallmannusa
AGENDA FOR SCHOOL

• Lecture/ Hands-On Format
• Teach from the “Ground Up”
• Practice techniques
Training School Schedule

**Wednesday**

Morning Session------ Sub-Floor prep, Primers and Adhesives

Afternoon Session-----Machines, Waterborne Sealers and Finishes

**Thursday**

Morning Session-----Continue Waterborne Finishes, Magic Oil 2K

Afternoon Session--- Kitt, Bond, Cleaners and Maintenance
The Foundation Begins With Excellent Technical Support
INTRODUCTIONS OF STUDENTS

Name
Location
Company
Goals for the School
Welcome Back!
BRIEF LESSON IN CONCRETE

Properties of Concrete
(water, cement, aggregate)

Chemical process “Hydration”

Dry vs. Cure (Hoover Dam example)
-- Rule of thumb 28 days to cure
GYPSUM

Gypsum, Aggregate and Water
(AKA gyp-Crete or light weight concrete)

Dries by evaporation.

Curing Approx. 14-28 days
Must be 100% cured…why?

Low PSI

Super Absorbent
Moisture

Water vs. Vapor

Liquid….Gas

Moisture travels upwards

NUMBER ONE REASON FLOOR COVERINGS FAIL!
Investigation Procedures

• What Is The Structure of the Substrate?

  • Wood Sub-floor
    • Moisture content of sub-floor?
      • Equal to moisture content of hardwood?

  • Crawl Space
    • Is there a plastic vapor barrier in place on top of the dirt?
    • Fans to cycle fresh air from outside?

  • Open basement
    • Wet slab? Moisture travels up!

  • Finished basement
    • Typically not a concern with moisture since there is ventilation of heat/air, dry wall and such.
Investigation Procedures

**Gypsum**  (AKA Gyp-Crete or even light weight concrete)

Applied directly on top of wood sub floor?
What’s underneath?  (Slide before).

On top of Concrete?
Wet concrete?

Remember Gypsum must be completely cured and dried before installing hardwood on top.

Do not apply moisture vapor retarding systems on top of Gypsum based substrate.
Moisture Testing Concrete

Calcium Chloride

Most common concrete test, sold by many distributors

Only measures moisture vapor emissions at that time!

Only measures surface of concrete

RH of air and temperature can falsify test results

Commonly done incorrectly by contractors
Moisture Testing Concrete

**RH Probe**
Most accurate measuring of concrete moisture.

Measure RH of concrete in middle (40% down) of concrete.

Shows the potential of possible future failures.

More expensive than calcium test but well worth it.

The best way of testing concrete is to do both the calcium chloride and the RH probe. Shows potential and emissions at that moment.
Concrete Questions to Write Down!

What is the moisture content of the wood before installation?

What is the moisture content of the air?

What is the temperature of the air?

Where did you document this information?

If a failure happens……………

NWFA inspector hired

Have to play “CSI”

They will ask these questions above!
WHAT ARE THE RISKS IF NO PLASTIC VAPOR BARRIER IS PRESENT UNDERNEATH THE CONCRETE?

- Hydrostatic Pressure
- Osmotic Blistering
- ASR (Alkali Silica Reaction)
- Other

Read the technical data sheets for products!!
Abrading/Opening Up Pours
Removal Of Contamination

Three Common Ways of Removal

Shot Blasting  BEST
Diamond Plate Abrasion  BETTER
Copper Milling Discs  GOOD

WHAT TYPE OF CSP PROFILE ARE YOU TRYING TO ACHIEVE?
CSP Profiles

CSP 1 (acid etched)
CSP 2 (grinding)
CSP 3 (light shotblast)
CSP 4 (light scarification)
CSP 5 (medium shotblast)
CSP 6 (medium scarification)
CSP 7 (heavy abrasive blast)
CSP 8 (scabbed)
CSP 9 (heavy scarification)
CSP 10 (course planing)
SHOT BLASTING

Best Way to Achieve CSP Profiles

Most Expensive

Usually Hired Out
Copper Grinding Discs

- Conforms to ordinary Buffer or Spider, Hard Plate needed.
- Can Achieve a CSP Profile of 0-1
- Great for removal of adhesives
- Great for smoothing of Gypsum
- Great for flattening OSB
- 14, 16, 24 grits.
The Ninja Diamond Plate

- Conforms to ordinary Buffer / SPIDER
- Achieves CSP Profile of 1 and/or 2.
- Great for removal of adhesives, some curing compounds, opening up smooth concrete, etc.
- Several different attachments.
Demo
SUBFLOOR PREPARATION

TECHNICAL SUPPORT
MOISTURE VAPOR RETARDERS
PALLMANN P104

• 1 component product that is roller applied; very economical due to high coverage rates.

• Must apply 2 coats for moisture vapor retarder----handles up to 7 pounds MVER and up to 90% per relative humidity of the concrete slab.

• May apply 3 coats to barrier up to 95% relative humidity. Apply 2 coats then wait over night to dry before adding the 3rd coat. Do not apply 3 coats in one day.
PALLMANN P104

- Strengthens sub-floors such as concrete, gypsum, cement, wood. (Doing a glue assist for wide plank?)

- Must apply 2nd coat or hardwood adhesive within 48 hours, if after 48 hours then abrade the P104 with a 40-60 grit screen or disc on a rotary buffer.

- If using leveling compounds on top, you must grit bind with clean, dry sand approximately .3-.4 millimeters in size (30 or 40 mesh). Must grit bind in 2nd or 3rd coat depending if being used as MVR.

- VOC= Less than 15 grams per liter.
PALLMANN P104

- Will adhere to smooth non-absorbent surfaces like (well bonded) tile, vinyl, granite and other floor coverings.

- Will adhere to most (well bonded) adhesive residues, even asbestos adhesives and will encapsulate smell.

- Binds dust and dirt so the adhesive will not roll up or risk adhesion to substrate.

- Creates a smooth non-absorbent surface to apply adhesive. Can get up to 10% more adhesive coverage.
PALLMANN P104

Used as a MVR on Wood Substrate?

PALLMANN P-104 may reduce moisture differences between the sub-floor and wood floor in which the sub-floor does not exceed 20%. In addition P-104 will act as a strengthener of the plywood subfloor which will encapsulate any dust or debris allowing for ease of board movement for quicker installation of the wood floor.

When applying P-104 over plywood subfloors it is recommended to use the 10” Nylon Roller (#9194) at an application rate of 350 sqft per gallon.
PALLMANN P108

- High quality 2-component epoxy resin, easily roller applied.

- 2 coats can handle all moisture without limitation----handles 100% relative humidity of the concrete slab, (concrete must be at least 3 days old and with no visible standing water).

- Each coat dries in about 12 hours, colder temperatures will delay dry time.

- Recommend Nylon Fiber roller (#9394) for application
PALLMANN P108

• Need to get 200 square feet per pail depending on porosity, do not exceed 200 square feet per pail. Absorbent sub-floors will get less coverage.

• Must apply 2nd coat or hardwood adhesive within 48 hours, if after 48 hours then abrade with 40-60 grit screen or disc on a rotary buffer.

• If using leveling compound on top, you must grit bind the 2nd coat with clean, dry sand approximately .8 millimeters in size. Approximately 16 mesh size.

• May apply a “one step” application method but needs to be properly trained by a PALLMANN Rep. Use our B2 blade size trowel and then back roll with the Nylon Fiber Roller. Must achieve 100 square feet per pail.
PALLMANN P106

- A self leveling compound Primer for new substrates, old adhesive and leveling compound residues, existing flooring such as tile, smooth granite, vinyl etc.

- Film forming, excellent bonding to many surface types.

- Will get approximately 300-400 square feet per pail depending on porosity.

- For dense, non-porous, old adhesives, ceramic tile, or wood substrate use P106 undiluted with Foam roller (#9194).

- For absorbent substrate dilute with water and use an exploded tip push broom, or the Nylon Fiber roller (#9394).
PALLMANN P25

- Calcium Aluminates, Portland cement self leveling compound.
- Contains the Levelmax effect which allows for superior flow and leveling capabilities.
- Ideal for hardwood flooring installations due to high sheer strength and ideal surface for better adhesion with adhesives.
PALLMANN P25

- Can level up to 1 inch in a single application. Add sand into mixture to level over 1 inch.

- 5300 psi compressive strength and 1100 psi tensile strength exceeds most floor coverings recommendations for substrate strength.

- Add 5.5-6 liters or approximately 6 quarts of cold clean water.
DEMO
Recap of Sub-Floor Prep

- SYSTEMS APPROACH TO SELLING
  - Moisture Mitigation, Sub-floor Prep, ...........

- P-104 as a insurance policy for glue down projects (Contaminants)

- P-108--- as a insurance policy for glue down projects (Moisture)
Mr. Pallmann contractor has a scheduled glue down application of 1,000 sqft of 4” engineered 3/8 pre-finished floor. In addition he is planning on using the Pallmann P-5 adhesive. Here is a breakdown of materials.

4” 3/8” prefinished floor 1,000 @ $2.99 = $2,999.00

PALLMANN P-5 Adhesive 5 buckets @ $117.00 $585.00

PALLMANN B-11 Trowel 1@ $9.99 $9.99

Total $3,593.99
P104 Scenario

Two months later Mr. Pallmann contractor calls because there are some boards starting to release from the floor. Upon inspection it is noted that there is a lot of Drywall dust, and a few areas had grease spots where the adhesive did not make good contact.

- 4" 3/8” prefinished floor  1,000 @ $2.99  =   $2,999.00
- Pallmann P-5 Adhesive  5 buckets @ $117.00  $585.00
- Pallmann B-11 Trowel  1@ $9.99  $9.99

Total  $3,593.99

- Pallmann P-104  2 @ 85.85  $171.70
- Pallmann P-104 Roller  1 @ 11.99  $ 11.99

Total  $ 183.69
PALLMANN P13

- Tongue and groove adhesive for floating floors. Can be used for gluing plugs and dowels. Also universal adhesive for stairs, risers and other wood projects.
- Fast drying with high final strength, semi-rigid/flexible, dries clear.
- Special cap/lid that allows you to cut whatever size or angled hole to apply the adhesive.
- Solvent free adhesive.
- Coverage will depend on groove size and how much the contractor applies.
PALLMANN P5

- STP technology (Silane Terminated Pre-polymer)
- Rigid yet flexible adhesive, high sheer strength
- 30-40 minutes working time, great green grab. Easy to spread
- Acceptable adhesive for most types of hardwood, including solid, engineered and underlayment
- Solvent and water free, so it won’t swell the wood
PALLMANN P5

- No length or width restrictions on engineered hardwood, and acceptable adhesive for solid hardwood up to 8” wide

- Must use USA style B11 (#52900) trowel or Ergo style B-11(#41787 trowel and #13399 blade) for applications, will get approximately 65 square feet per gallon.

- Use the B3 (#41787 trowel and #13387 blade) or 1/8, 1/8, 1/8 “v” notched trowel for thin, smooth backing engineered or underlayment. Will get approximately 70 square feet per gallon.

- Silane adhesive will clean off the pre-finished hardwood boards easier compared to urethane adhesives. Use the PALLMANN CLEAN BOX within 24 hours for best results.
PALLMANN P7

- Fast grab, urethane adhesive sufficient working time, rigid adhesive that will pour out of the container

- Water and solvent free. Freeze thaw stable above 0 degrees F. Will not swell wood

- Also a great adhesive for underlayment

- No restrictions on width or length of hardwood flooring (engineered or solid)

- New advanced foaming effect to reduce hollow spots
PALLMANN P7

- Must use USA style version B11 (#52900) or the Ergo style B-11 (#41787 trowel and #13399 blade) for hardwood applications, will get approximately 65 square feet per gallon

- Use the B3 (#41787 trowel and #13387 blade) or 1/8, 1/8, 1/8 “v” notched trowel for thin, smooth backing hardwood and/or underlayment. Will get approximately 70 square feet per gallon

- May sand the floor the next day

- VOC = Less than 10 grams per liter
PALLMANN CLEAN BOX

• Moist cleaning cloths for removal of adhesive off floor, tools and hands.

• Will not dull or damage pre-finished or site finish hardwood.

• Clean adhesives within 24 hours for best results.

• Also works well in cleaning off MAGIC OIL 2K from tools and hands.

• Good for cleaning grease, oil, tar, wax, ink, graphite, grass-stains and other.
Cobra 8” Sanding Machine

- 8” Belt Sanding Machine
- Serpentine Belt Design
- Feather Handle Drum Operation
- 5 HP German Designed Motor
- 3 or 4 Back Wheel Design
- Industry Leading Upper Roller Assembly
- Legacy Design
Cobra 10” Sanding Machine

- 10” Belt Sanding Machine
- Serpentine Belt Design
- Feather Handle Drum Operation
- 5 HP German Designed Motor
- 3 or 4 Back Wheel Design
- Industry Leading Upper Roller Assembly
- Legacy Design
Cobra II 8” Sanding Machine

- 8” Belt Sanding Machine
- Serpentine Belt Design
- Feather Handle Drum Operation
- 5 HP German Designed Motor
- 3 or 4 Back Wheel Design
- Industry Leading Upper Roller Assembly
- LED Light
- Adjustable Handle
- Next Generation Belt Sander
Gecko Star 2.0 Edger

- 2.4 HP Motor
- 24lbs overall weight
- Low Decibel Rating
- Built In Lights
- Adjustable Wheels
- 4200 RPM
- Hook and Loop or Classic Sandpaper Attachment
PALLMANN HEPA VAC

- 1.54 HP Motor
- 103 CFM
- 88.6” water lift pressure
- 22lbs – Pre-Separator
- 99% particle separation rate
- 13.21 gallon capacity
- True HEPA Filter Design
The PALLMAN SPIDER is a revolutionary floor sanding machine which allows floors to be sanded flat, with great time savings, and could eventually replace traditional ways of sanding a wood floor.

The method in which this achieved is a extremely powerful motor, sanding techniques, and a planetary gear system.

The PALLMANN SPIDER is NOT just another buffer
PALLMANN SPIDER
Triple Disc

- perfect sanding at each step due to the variable drive, triple disc technology
- single disc option
- durable chain drive
- easy to clean
Customization

• extra weights increase the sanding pressure
Controlled

- Variable Speed
- Safety Start (yellow button)
- Smooth Start (wind up)
- Adjustable Handle
Clean

- Powerful dust removal
- Connects to PALLMANN HEPA VAC
- Stainless steel
- Dust Skirt
Easy Transport

- Large diameter wheels
- Strong construction
- Ball bearing axle
- Non marking tires
## Technical Details

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Supply</td>
<td>230V</td>
</tr>
<tr>
<td>HP</td>
<td>2.7 HP</td>
</tr>
<tr>
<td>Frequency</td>
<td>60Hz</td>
</tr>
<tr>
<td>Rotation Speed with plate</td>
<td>85 – 400 RPM</td>
</tr>
<tr>
<td>Width of Sanding</td>
<td>16 inch</td>
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<tr>
<td>Sanding width from wall</td>
<td>1 inch</td>
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<tr>
<td>Total Weight</td>
<td>88 lbs</td>
</tr>
<tr>
<td>Additional Weight(s)</td>
<td>33 lbs</td>
</tr>
<tr>
<td>Triple Disc Weight</td>
<td>42 lbs</td>
</tr>
<tr>
<td>Hook – Loop Discs</td>
<td>7 inch</td>
</tr>
</tbody>
</table>
Pad Structure

7" Hook and Loop Sand Paper

Support Disc

Satellite pad
PALLMANN SPIDER
LED Indicator lights

Explanation of the LED-lights

3 LED on green                      Normal Operation
1 LED on yellow or red              Close to overloading / Overloading
1 Continuous LED Red                Overloaded – Machine Shut Off

The machine will automatically reduce speed or stop to ensure damage is not done to the electrical system.

If the machine is continuously indicating yellow or red please do the following

• Reduce the rotation speed
• Remove weight(s) on the machine
Sanding Sequence - Machines

**First Pass**
Sand across wood grain with Spider

**Second Pass**
Sand with the wood grain using Spider
Edge with GECKO STAR 2.0

**Third Pass**
Fine Sanding with the grain using Spider
(options depending on finish choice)

Let’s look at handout for sanding grits
Spider Jobsite Applications

- Prefinished wood flooring (resand)
- Solid wood flooring (resand)
- Unfinished wood floors
- Full sanding, removal – fine sanding
- Narrow hallways, under stairs, attic’s
- Concrete grinding (explanation)
Turbo Scrubber

- Compact design for confined areas.
- Dual rotating brushes for maximum cleaning effectiveness.
- Adjustable brush pressure for all floor conditions.
- Large tires for easy transport.
- Dual squeegee so no residue damage to surface.
- 115 Volt / 60 Hz power to plug in standard 110 outlet.
Demo
SEALERS

PALL-X CLEAR
Waterborne, 1-component sealer ideal for use on lighter color species or when a clear, natural look is desired.

PALL-X COLOR
Waterborne, 1-component sealer ideal for use where color enhancement of wood floor is desired or over a dark stained floor.
Why Do We Seal Floors?

• Reduce Side Bonding (Panelization).
• Reduce Chances for White Lines.
• Truly Seal the Wood Pores for a Better Finish Build.
• Keep Color True with traditional solvent stains.
• More Forgiving on Raw Wood and Less Expensive than Finish.
PALL-X CLEAR

- **PALL-X CLEAR** is a 1 coat system only. Two coats will create a soft layer.

- 100% clear sealer which does not have a coloring effect or an enhancement to the hardwood.

- Ideal for light woods such as maple, ash, birch and hickory or when a light appearance in oak is wanted to be achieved. Also recommended for pastel stain colors like white or grey.
PALL-X CLEAR

- Not suitable for all types of woods.... Cherry for example, starts chemical reactions possibly leading to patchy colorization or a possible grey hue.

- May abrade if desired. Maroon pad within a few hours or 220 grit and finer grit pad or disc if over night. Abrasion is not necessary for proper adhesion, however it is possible.
Take the "Color" Challenge!

Can you tell which side is coated with an oil-based sealer and which side is coated with Pall-X Color waterbased sealer?

Pall-X Color waterbased sealer:
- Forgiving Application
- Low Grain Raise
- Quicker dry times than OMU sealers
- Increase Vibrancy of Stain Colors

Take the "Color" Challenge on your next floor today!
PALL-X COLOR

• **PALL-X COLOR** is a one coat system. Two coats will create a soft layer.

• Fast drying and extremely forgiving sealer.

• May abrade with maroon pad same day or 220 grit and finer pad or disc if overnight. Abrasion is not necessary.
PALL-X COLOR

• Deep coloring effect can replace the use of dry fast sealers to create that oil look.

• Most recommended sealer for applying on top of solvent based stains. Enhances the color and creates a nice build that after the first coat of finish greatly reduces the risk of abrading through to the stain.
Demo
PALLMANN FINISHES

- All PALLMANN Finishes are Clear, not Milky White
- Will not Amber or Fade over Time
- Can use Roller, Padco pad, T-Bar, Brush…etc
- Apply at 450-500 Square Feet per Gallon
A LEGEND’S NEXT GENERATION

“The family legacy continues”

PALL-X 96 NEXGEN ADVANTAGES:
- Enhanced Durability
- Quicker Cure Times
- Increased Slip Resistance
- Exceptional Flow and Leveling

CONNECT WITH US www.pallmann.us

PALLMANN

PREMIUM FLOORING SOLUTIONS
PALL-X 96 NEXGEN

• Extremely forgiving finish that is a light commercial grade.

• **PALL-X 96 NEXGEN** may be re-coated before 24 hours without abrading, after 24 hours it needs to be abraded.

• **PALL-X 96 NEXGEN** must dry for a minimum of 2-3 hours before abrading and re-coating. (150 – 180 grit)

• **PALL-X 96 NEXGEN** takes approximately 7 days to cure.

• **Three Sheens Available**: Semi-Gloss, Satin, Matte
POWER PLUS TECHNOLOGY

What is POWER PLUS TECHNOLOGY?

POWER PLUS TECHNOLOGY = POWER of a two-component finish PLUS the ease of single component finish
# PALL-X POWER

## Features
- High Durability
- No Hardener Needed
- Clear
- Fast Cure Times
- Four Sheens
- Superior Flow/Leveling

## Benefits
- Ideal for commercial or residential applications
- No mixing and No Waste
- Will not amber over time
- Fully cured in 5 days
- Available in Ultra Matte, Satin, Semi-Gloss, Gloss
- Forgiving applications
EVERYTHING LOOKS BETTER IN GOLD

PALL-X GOLD ADVANTAGES:
- Advanced 2 Component Waterborne Finish
- Fully Cured In 3 Days
- Superior Flow And Leveling
- Clear, Non-Ambering Formula

CONNECT WITH US

www.pallmann.us
PALL-X GOLD

• Highly Durable Commercial Grade Finish

• Our best finish for Chemical Resistance

• The pot life of the PALL-X GOLD after adding the hardener is 4 hours

• PALL-X GOLD may be re-coated before 24 hours without abrading

• PALL-X GOLD must dry for a minimum of 4-5 hours before abrading and re-coating

• The PALL-X GOLD takes approximately 3 days to cure
Best, Bester, Bestest
Demo
Recap

• Our finishes are 100% clear, will not amber or fade over time. Our finishes and sealers contain raw materials that are not UV sensitive. Being a clear finish we create color enhancements with our sealers.

• Since our finishes our 100% clear this also gives a great appearance of the wood; great clarity. Does not have a milky white haze to it like some competitive water base finishes.

• Economic Costs to using Waterborne Finishes (next slide)

• Marketing of our finishes to homeowners
Product Scenario --- Using a Sealer
### Product Scenario 1 --- Using a Sealer

<table>
<thead>
<tr>
<th>Scenario 2</th>
<th>System &quot;A&quot; 96 NEXGEN, 96 NEXGEN</th>
<th>System &quot;B&quot; Color, 96 NEXGEN, 96 NEXGEN</th>
<th>Difference</th>
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</thead>
<tbody>
<tr>
<td>Total Cost of Materials</td>
<td>$284.00</td>
<td>$394.00</td>
<td>$110.00</td>
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<tr>
<td></td>
<td>$.28 sqft 1,000</td>
<td>$.38 sqft 1,000</td>
<td>$.10 per sqft</td>
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# Product Scenario --- Sqft Costs

<table>
<thead>
<tr>
<th>Product</th>
<th>Cost</th>
<th>Coverage</th>
<th>per sqft cost</th>
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<tbody>
<tr>
<td>One Gallon of PALL-X 96 NEXGEN</td>
<td>$71.00</td>
<td>500 sqft</td>
<td>$0.14</td>
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<tr>
<td>One Gallon of PALL-X GOLD</td>
<td>$107.00</td>
<td>500 sqft</td>
<td>$0.21</td>
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<tr>
<td>One Gallon of PALL-X POWER</td>
<td>$89.00</td>
<td>500 sqft</td>
<td>$0.18</td>
</tr>
<tr>
<td>One Gallon of PALL-X COLOR</td>
<td>$55.00</td>
<td>500 sqft</td>
<td>$0.11</td>
</tr>
<tr>
<td>One Gallon of PALL-X CLEAR</td>
<td>$48.00</td>
<td>500 sqft</td>
<td>$0.10</td>
</tr>
<tr>
<td>One Gallon of Oil Modified Finish</td>
<td>$30.00</td>
<td>500 sqft</td>
<td>$0.06</td>
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MAGIC OIL 2K

- 2-Component hardened oil that is a penetrating finish; does not form a film. Small percentage of wax.
- MAGIC OIL 2K Neutral is a 5-1 mixing ratio.
- 4 hour dry time and fully cures in 12 hours.
MAGIC OIL 2K

• Enhances color of wood grain, easily spot repaired since it is a diffusive product.

• May be used on top of solvent and water based stains; make sure the stains are completely dry before applying MAGIC OIL 2K.
MAGIC OIL 2K COLORS

• Same application procedures as MAGIC OIL 2K Neutral.

• Comes in White, Grey, Black, Red-Brown, Dark-Brown and Black-Brown.

• Can be mixed with all other Magic oil colors including neutral to create a large variety of colors or applied over stain that is completely dry.

• Cures in 24 hours, foot traffic 12 hours, touch dry 8 hours.
Demo
PALL-X BOND

- Use Clean Strong to clean floor before using PALL-X BOND. This will remove the contaminants.

- Mix 3 parts “Part A” (material) to 1 part “Part B” (hardener) while stirring slowly

- Let dry for 90 minutes and coat finish on top, do not wait longer than 4 hours before applying finish on top.

- Must do test spot on floor to check adhesion before applying on whole floor, especially for pre-finished hardwood.
PALL-X BOND

- Will work on top of MAGIC OIL 2K, solvent based stain (repairs), any water base and oil base site finished floor.

- May not work on top of natural oils such as Tung oil, linseed oil, etc.

- Must apply PALLMANN finish on top with recommended coverage rate or thicker to get smooth and level results with the appearance. Applying the finish too thin on top may get a rough appearance.

- Must do test spot on floor to check adhesion before applying on whole floor, especially for pre-finished hardwood.
PALLMANN CLEAN STRONG

- Use to deep clean hardwood floors before using re-coat system, or recoating existing site finished floors to remove contaminants.

- Dilute 10-1 (10 parts water and 1 part Clean Strong), apply with spray bottle. Let sit for no more than 5 minutes, then buff with green pad or comparable. Immediately wipe off with clean wet rags and clean water. Wipe a 2nd time with clean wet rags and clean water. Let dry and then apply re-coat system or abrade floor and coat.

- May use Clean Strong undiluted on film forming finished floors that have been waxed or have a thick layer of maintenance products.

- Do not use on MAGIC OIL 2K……it will remove MAGIC OIL 2K from the wood
PALL-X KITT

• Water based joint filler, less than 100 g/l VOC.

• Mix with sanding dust, preferably 80-100 grit edger dust to get an exact color match.

• Use PALLMANN stainless steel trowel to apply.

• Must sand after using PALL-X KITT, usually 15-30 minutes dry time.

• Coverage rate depends on size and amount of cracks in the floor. Generally 200-400 square feet per
Demo
PALLMANN HARDWOOD FLOOR CLEANER

- Will not streak, dull out or leave a residue.

- Must use on MAGIC OIL 2K floor as a daily cleaner, we do not recommend competitors cleaners due to small wax content of MAGIC OIL 2K. This is because the PALLMANN cleaner has low solvents where competitors brands are much higher.

- Perfect for water base, oil modified and pre-finished hardwood floors, even cleans glass.
PALLMANN HARDWOOD FLOOR CLEANER

- Can also be used to clean most hard surfaces.

- Comes in a mop kit with a microfiber mop and duster pad or sold separately. Have cleaner display worth the price savings.

- We sell a gallon concentrate to re-fill the 32 ounce bottles.
PALLMANN MAGIC OIL CARE

- Water, oil and wax emulsion to refresh and revive MAGIC OIL 2K oiled floors.

- Most maintenance cycles mix 1 part MAGIC OIL 2K CARE to 10 parts water in spray bottle, lightly spray floor and micro fiber mop.

- May apply undiluted.
PALLMANN MAGIC OIL CARE

- We have created a MAGIC OIL 2K maintenance sheet to hand out to customers explaining the process. This sheet is also available online on our website.

- Easiest maintenance program for a natural oil compared to the competition.
• Use undiluted to deep clean and remove MAGIC OIL CARE before recoating Magic oiled floors.

• Use spray bottle to apply MAGIC OIL Clean N Prep on the floor, wait a few minutes and then buff with a green pad. Immediately wipe floor with wet rags and clean water. Wipe floor a second time with clean wet rags and clean water.

• Process explained on MAGIC OIL 2K maintenance sheet.

• Must re-oil floor after using the MAGIC OIL Clean N Prep

• Formerly labeled: PALLMANN CLEAN
Demo
• Cleaning Products
• Mirror Test

• Clean Strong
• May be used on all types of film forming finishes
CARE AND MAINTENANCE

HARDWOOD
COMPLETE
Quality Control

- Lab Tests in Germany
- Second Test of Retains in United States
- Shipping Container Read Out (Hot, Cold, etc.)
- If there is a batch problem it effects the whole batch not just 1 gallon. Hundreds of gallons
- We take pride in manufacturing a quality product
Batch Numbers

Year, Month
Batch Numbers

Day-Month-Year
That’s All Folks!!