

ELI MO School of Woodworking & Handyman Skills

HANDYMAN Level 2 – Course Summary & Tips

To do repairs in your home and save lots of money, you need 3 things

- 4) Knowledge (“knowhow”) to do the repairs. This is what this course taught you**
- 5) The proper tools (as listed below)**
- 6) CONFIDENCE. Don’t be afraid to do repairs.**

Session 1: TILES

- a) Tiles, repairing or replacing damaged tiles / putting up a backsplash
- b) Grouting, cleaning or replacing grout

TIPS :

- 1)** Tiles can get damaged. If you have a small crack in a tile, you can put some epoxy glue on the crack to try to stop the crack from spreading. However this will not look good, and may eventually crack again.
- 2)** The best way to fix a damaged tile is to replace it.
- 3)** Remove the grout around the tile, preferably using an angle grinder with a thin ceramic disc. Wear a mask, gloves and goggles – it will be messy. Simply grind out the grout between the tiles. Be careful not to damage the tiles beside the cracked one.
- 4)** Or if you do not have an angle grinder, you can use a flat head screwdriver and hammer to remove the grout. Again, be careful not to damage the adjacent tiles.
- 5)** Then take a hammer and smash the damaged tile so that it cracks into pieces. Remove the cracked pieces – careful they may have sharp edges. Try to remove as much of the old tile glue as possible – otherwise the replacement tile may not sit flush with the other tiles. Then clean out the space where the old tile was. Use a vacuum or damp cloth to remove all the dust.
- 6)** Cut the replacement tile to fit the spot where the old tile was. Remember to leave a bit of room on each side of the tile for new grout. Apply a small amount of tile glue to the back of the tile and some glue to the space where the tile will be going. Place the tile onto the glue. Add tile spacers to make sure the tile is evenly centered.
- 7)** Let the tile dry for at least 24 hours. Then apply grout around the tile. (Mix the grout to a loose “humus” consistency). Use a grout tool to clean off the excess grout. Then use a damp sponge or cloth to remove the final grout that is sitting on top of the tiles. Let the grout dry for another 24 hours. Now the tile job is complete.
- 8)** Don’t be afraid to try a tiling job. Worst case you crack a tile and have to use another one. You CAN DO IT.

2) Session 2: WALLS & FLOORS / Plumbing tips

- a) Drilling through tiles
- b) Replacing silicone around your bathtub, sink or tiles
- c) Understanding how taps work / fixing leaks and drips / changing faucets
- d) Dealing with mold in bathrooms/kitchens

TIPS :

- 1)** When drilling a hole into a tile, it is best to use a special tile drill bit. You can buy this tile drill bit at most hardware stores. You may want to put a small piece of masking tape or duct tape over the spot where you are drilling the hole (helps stop the bit from chipping the tile).

- 2) The drill should be at a relatively fast speed, but do not try to drill the hole too quickly. It takes a lot longer to drill a hole into tiles than other materials (like concrete, wood or gevis). After the hole is drilled, remove the tape.
- 3) It is very easy and very satisfying to remove old silicone or other caulking, and to apply new caulking. To remove the old caulking, simply take a box cutter knife and cut below and on top of the old caulking. Then use a small metal scraper to remove the old caulking. It should come off quite easily. You may have to repeat this a few times, but try to remove as much of the old caulking as possible. You do not need to dig deep into the grooves – just remove the caulking above the tiles.
- 4) Clean and dry the tiles where the new caulking will go.
- 5) Use Silicone for bathrooms and kitchens where there will be a lot of water (in your tub, shower, sinks, etc). You can use regular “mastik” caulking everywhere else. You will need a caulking gun.
- 6) Cut the end off of the caulking tube. And cut the caulking nozzle on a 45° angle about 3 cm from the tip. To apply the caulking, as you squeeze the trigger on the caulking gun, slowly drag the nozzle along the edge where the caulking is to be applied.
- 7) You may want to use your finger or a small tool to make an even line across the new caulking. Let the caulking dry for 24 hours before you let water touch it.
- 8) If you have a leaky faucet, generally you replace it. However some faucets can be repaired. To remove a faucet, there is a nut underneath your sink that is holding the faucet tight. Loosen and remove that nut and the faucet will come off. The “first turn” to remove the nut will probably be difficult. Use WD40 to lubricate the nut.
- 9) You can try to repair a faucet by first removing it. Then you can unscrew various parts of the faucet to see if any of the gaskets are missing or defective. If they are, that is probably where the leak is coming from. Take the faucet to a hardware store that has a good selection of plumbing supplies and get the right replacement gaskets. Then reconnect that faucet and re-attach it to the sink.
- 10) If you have mould or mildew around your tubs/showers, sinks, best to replace the caulking. However there are several mould cleaners on the market that you can buy at a local hardware or even grocery store. Spray the cleaner on the mould, let it sit for a short while, then brush it off with a soft bristle brush or a coarse cloth. Even if you clean the mould, eventually it may return – so at some point you may want to replace the caulking.
- 11) It is simple and satisfying (and inexpensive) to replace caulking and will save you a lot of money. You CAN DO IT.

3) Session 3: FLOORING

- a) Installing tongue/groove flooring
- b) Installing trim / wood or ceramic
- c) Installing chair rail or crown moulding

TIPS :

- 1) Tile floors are the standard in Israel. Tiles come in many different sizes and hundreds of colors and patterns. Tiles are durable and can last a long time. However they are hard and cold. An alternative to tiles is parquet flooring. Parquet floors are warmer, softer and have more of a “country home” look, but they may not be as durable as tiles. Parquet are generally long boards (about 1M+ long) that snap together with a tongue and groove system. Parquet boards are about the same price as tiles, but the installation of parquet is much faster and cheaper. You can do it yourself.
- 2) To install a parquet floor, you need a “subfloor” that is flat. The best subfloor is your existing tile floor. If you have baseboards/trim around the edge of the floor, you need to remove that first. Simply take a flat head screwdriver and a hammer and gently put the screwdriver head on the top of the trim piece and tap lightly with the hammer to loosen the trim. Likely the trim pieces will have glue on them, and they may leave “pockets” in the wall where the glue was. No problem, we will put up new trim to hide those pockets.

- 3) Totally clean the tile floor and remove all bumps. You can use a scrapper to remove any bumps that are from small drips of concrete or plaster that may have been attached to your tile floor.
- 4) Roll out the foam paper that comes with the parquet flooring. Get full coverage of the floor with the foam paper, but there can be a couple centimeters of space between the foam paper and the walls. (Some parquet flooring comes with the foam or rubber backing already attached to the boards)
- 5) Then lay down the parquet boards attaching the tongue and grooves. Do one full length (from one side of the room to the other), then do the next full length beside it. You will have to cut some of the boards to fit the length of the room. Stagger the boards between the full lengths – it looks better and is stronger when the boards are staggered. And that's it. No glue, no screws, no mess.
- 6) Now you need to install floor trim or panels. For ceramic trim, cut the trim panels to about 6 cm height (or any height you prefer). Apply mastik (caulking) or Super 7 glue to the back of the panels and glue them to the wall.
- 7) For wood/plastic trim, cut the boards to the size of the wall. At the inside and outside corners you will need to cut a 45 degree angle on the boards so that they fit nicely together. Then apply mastik (caulking) or Super 7 glue to the back of the trim boards and glue them to the wall.
- 8) Final step is to caulk the trim panels so that there are no holes or grooves showing. Wait about 24 hours for the trim panels glue to be dry. Use your caulking gun to apply mastik (not silicone) to the top and bottom of the trim as required (you will probably not need caulking at the bottom of the trim boards). The same process applies for chair rail and crown moulding. These will really enhance the look of your home.
- 9) Installing your own parquet and trim is relatively easy and will save you thousands in handyman costs. You CAN DO IT.

4) Session 4: BASIC ELECTRIC

- a) Wiring a circuit with a plug, switch and light

TIPS :

- 1) In Handyman/woman 1 we learned about electricity and wiring. We learned how to change and attach switches and plugs and how to attach wires. We learned how to strip wires and make an extension cord with a plug and outlet
- 2) In this course we wire a full circuit. We strip the first wire and connect it to a plug. Remember to remove all of the "posts" in the plug and use a small flathead screwdriver to connect the wires. Try to have a small part of the white wire come under the plug brace.
- 3) Then we connect one of the plug wires to the switch (either blue or brown)
- 4) Next we strip the second piece of wire and connect either the blue or brown wire to the other side of the switch. Then the end of this wire is connected to the light.
- 5) Finally we connect the other end of the two switch wires together with a connector. (we do not use the yellow.green wires.) We can connect blue to blue, brown to brown, or blue to brown. This is how we wire a light switch circuit.
- 6) When you are doing this in your home there may be multiple wires in the switch or the light. The switch may control two (or more) lights, and these lights could be daisy chained together.
- 7) Or the switch may have multiple wires coming from it (not just one wire on each end). Remember to take a picture of the existing wires before you start making changes.

5) Session 5: Emergency car repair

- a) How to check and add fluids (washer fluid, oil), replace wiper blades
- b) How to boost your car
- c) How to change a flat tire

TIPS :

- 1) To add washer fluid, there is a reservoir usually at the left side under the hood. This generally has a picture of windshield wipers on it. Simply lift the lid and pour in the washer fluid until it is full. Not a problem if you spill a little.
- 2) To change a wiper blade, you just need to unclip the existing wiper blade from the wiper "arm". The blade comes off and you can take it to an auto supply store (like Auto Depot) to get a replacement blade. Then just re-attach it to the wiper arm.
- 3) To boost your battery, first attach the red jumper cable to the red (positive) lead on the "dead" battery. Then attach the other side of the red jumper cable to the red post on the battery of the car that will be jump starting the dead one. Then repeat with the black cable. First attach one end to the black (negative) post on the dead battery. Then attach the other end of the black cable to the black post on the good battery. Do not let the red and black cables touch each other.
- 4) Then the car with the good battery should be turned on. Wait a few minutes, and then the car with the dead battery can be started.
- 5) Once the car with the dead battery is running – do not shut it off. Let that car continue to run (so that the dead battery can re-charge a bit. Now remove the black cable from the boosting car and then from the dead battery car, and then remove the red cable from both cars.
- 6) The car that had the dead battery should now be driven for a while to allow the battery to re-charge. It is best to drive to an auto repair shop for them to determine if the battery is dead or defective.
- 7) If you have a flat tire, first thing to try is to inflate the tire (with an electric tire pump – that hopefully you have in your car). Once the tire is inflated, quickly drive the car to the nearest tire repair shop. It usually costs less than 50 shekels to repair the flat tire. If the tire is really damaged you may have to replace it.
- 8) If your tire cannot be inflated, then you can change it to the spare tire. First make sure you have a spare tire. Pull off to the side of the road where it is safe. Put on your emergency brake. To release the screws on your tire, a good trick is to put the tire iron (crowbar) on one of the nuts/screws and then stand on the tire iron and give it a little push with your leg. Your weight will usually be able to loosen the nut. Repeat for all of the nuts. But just loosen the nuts – do not remove them.
- 9) Once the nuts are loose use your jack to lift up the car beside your damaged tire. The jack has a groove on the top of it that fits into a bracket under the frame of the car beside each tire. Make sure that bracket is on the jack – otherwise you could damage the frame of your car – or the car could fall off the jack. Jack up the car so that the tire is slightly off the ground. Then loosen all of the nuts and remove the damaged tire.
- 10) Align the spare tire with the screws and attach the spare. Best to rotate which screws you tighten. Generally tighten screws across from each other. Make sure all of the screws are tight. Then release the jack and lower the car. Remove the jack. Now tighten all of the screws (nuts) by using some slight pressure with your foot/leg – but don't try to make it mega-tight.

6) Session 6: REPAIRING BROKEN THINGS

- a) Fixing small things with epoxy, hot glue gun – when to use each / Drawer tracks
- b) Painting basics / latex vs. oil / how to paint trim
- c) Waterproofing outside / using Sikaflex
- d) Getting rid of pigeons
- e) Tools you should have around your home

TIPS :

- 1) **Different types of glues >>>**
 - a. You can use a hot glue gun for many repairs. Hot glue gives a very strong "semi-permanent" bond. You can use it to hang pictures, fix broken items, and all kinds of other applications. Be very careful,

the glue comes out extremely hot and can burn your skin. And it dries very quickly – within a couple of minutes.

- b. Epoxy gives a very strong “almost permanent” bond. Epoxy comes in two tubes (or a double syringe). Dispense equal amounts from each tube (glue & hardener) and mix them well. Use a disposable knife and plate or other disposal utensil to mix them together. After about 30 seconds, when fully mixed together, apply the epoxy to the items you want to glue. Epoxy dries in about 5 minutes – but give it a good 12 – 18 hours to fully dry. Epoxy is good for gluing things that you want permanently glued – example : a hinge that came off a cupboard door.
- c. Two faced tape. This comes in different types. The clear plastic tape is usually stronger than the white foam tape. This gives a strong bond, but can be removed. Use two faced tape for mounting mezuzahs, small pictures and light weight items – even small lights.

2) Drawer tracks. Sometimes the track in your drawer comes off or the draw cabinet expands a bit and the drawer keeps falling off the track. Quick fix. Remove the drawer track from one side of the cabinet (or both if the cabinet expanded a lot). Take a small strip of cardboard (eg. from a cereal box) and cut it to the length and width of the drawer track. Then re-install the drawer track with the cardboard between the track and the side of the cabinet – so that the track is just a bit closer to the drawer.

3) Painting Basics

- a. Use latex (water based paint) for interior walls and ceilings. It is easy to apply and comes off with water. When painting walls, use a brush to paint the ends/top/bottom of the walls – this is called trimming. Then use a roller to paint the main section of the walls. Use a drip cloth to stop paint from falling/splashing on your floors or furniture.
- b. Use Oil based paint or stain for painting things that will be outdoors. Example : garden furniture, fences, decks, pergolas. This paint requires turpentine to remove it. But careful – turpentine is toxic.
- c. If you are only painting/staining one item, you may want to buy cheaper, disposable brushes or rollers. There are many different types of paint brushes and rollers to get into hard to reach places.
- d. It is recommended to apply at least two coats of paint or stain. Wait at least 12 – 24 hours for the first coat to dry (depending if it is outside or inside).

4) Waterproofing outside. For large cracks or holes you will have to use a cement type product to fill these holes. If the cracks or holes are smaller, you can use a putty type material called Sikaflex. It is applied using a caulking gun, that is a bit bigger than a regular caulking gun. Clean the area of dust and debris first, then apply the Sikaflex and let it dry for 24 hours.

5) Getting Rid of Pigeons. I have not yet heard of a 100% way to get rid of pigeons. But some things work better than others.

- a. Pigeon poop can be toxic. Clean it using gloves. Wash your hands after cleaning it.
- b. Breeding seasons. Pigeons generally breed from **March to June, and again in August to November**. This is when you may have the worst problems with them.
- c. What does NOT work very well
 - i. I have tried, 1) shiny tape, 2) CD's, 3) bottles, 4) fake birds, 5) sound machine, 6) spikes, 7) citrus oil/vinegar. These generally do not work well
 - ii. Netting (either metal or plastic) generally stops the pigeons from getting onto your merpeset etc., however it does not look very good.
 - iii. I have found that the Blue cleaning gel that smells like pine works OK. I generally spread it onto boards and then place those boards wherever the pigeons tend to land.
 - iv. One of the best solutions for getting rid of pigeons is having a cat nearby (or even a dog) – but that is not practical for most of us.
 - v. Let me know if you have any other good tips for removing or scaring away pigeons

d. Tools to keep around your house

- i. Basic hand tools like 1) Hammer, 2) Screwdrivers, 3) Pliers, 4) Adjustable wrench, 5) set of Allen keys, 6) box cutter knife, 7) caulking gun, 8) small ratchet set, 9) tape measure. You can get most of these tools at Max Stock, any hardware store or in a combo tool kit sold at ACE (*but only buy it when it is on sale*)
- ii. Basic glue gun, WD-40, different types of tape (for sure a roll of duct tape/duck tape), assorted zip ties,

FINAL TIP>> YOU CAN DO IT. YOU NOW HAVE THE KNOWLEDGE TO FIX MANY THINGS IN YOUR HOME. Don't be afraid to try. The more you practice, the better you will become – and you will save thousands of shekels in simple home repairs and maintenance