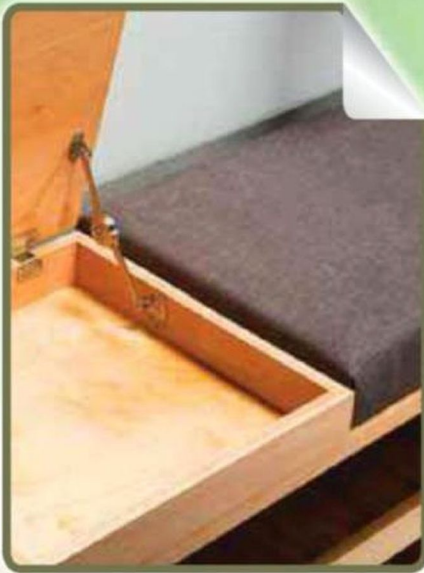


The Home HANDYMAN

November/December 2020 • Vol 30 No 11



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MAGAZINE



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- Plumbing repairs for the home
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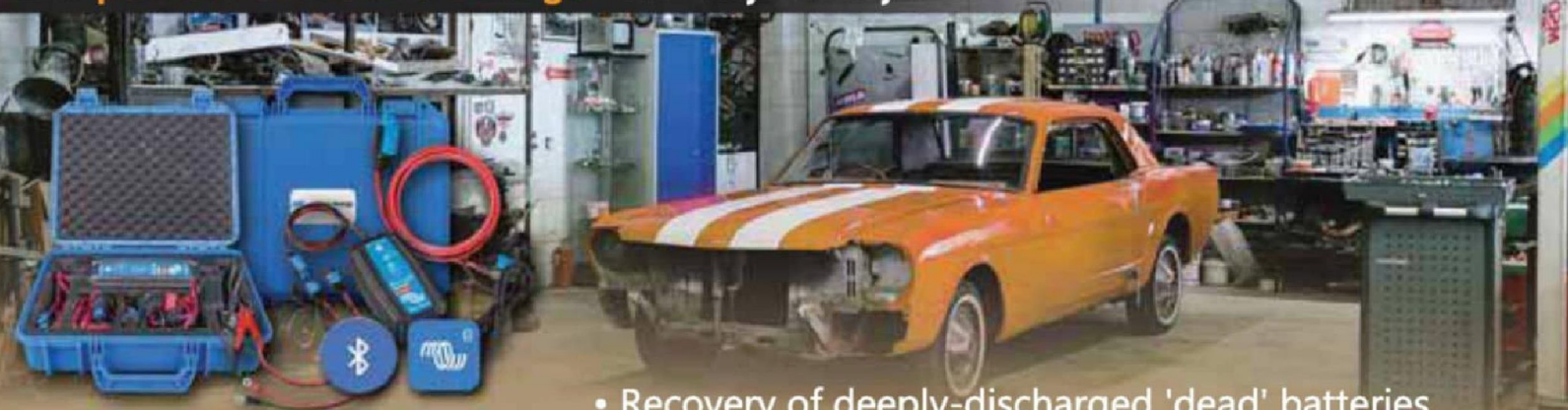
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The Home Handyman is published bi-monthly (6 issues per annum) by WJ Lindeque cc t/a BB Print (CK99/23366/23)

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Online www.homehandyman.co.za

Layout & design dee@stormdeezigns.co.za

Printing D&S Print

Distribution On The Dot | 011 713 9322

About *The Home Handyman* magazine:

The Home Handyman magazine is a specialized D.I.Y. publication and caters for a well-defined niche market since November 1993. The magazine equips its ever-growing readership with relevant D.I.Y. information, knowledge and skills.

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2021

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Back Copy	R35.50	R27.95
6 issues	R209.00	R169.00

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FROM THE WORKBENCH

A time to take stock

One of the benefits of spending so much time at home during lockdown, was that homeowners were able to get an intricate knowledge of their houses. Before March, so much of our lives where lived at breakneck pace – racing between work, meetings, the daily school runs and still fitting in time to spend with family and friends. Down time at home – for most – was a fleeting luxury. Yet the lockdown forced us to spend more time in our homes than ever before. And that came with consequences...



For us, we realised that certain aspects of our home maintenance had been neglected. And being home for a few months, these areas of neglect really started to get to us. While we had put so much care and attention into our three children's rooms, including major makeovers of all three within the past few 12 month, our room, as well as the lounge, hadn't been touched. In fact, they had not even had a new coat of paint since we moved in eight years ago, not to mention the fact that the curtains in both are the same ones we have had since we bought our first house many moons ago!

So, we have been using this time to slowly rectify the situation. We started off with the main problem areas, including repairing ridges and replacing cracked tiles on our roof before the rainy season arrived, and then repairing cracked and chipped plaster indoors. We removed every screw and nail in the walls and filled the holes. Then the hardest part – choosing new colours. Making sure a family of five agreed on the new shades was a small challenge, however, it is always the exciting part of any makeover, and after a little back and forth, and a few compromises, we walked out of our local paint store with many, many litres of paint.

Taking things slowly, making sure to do a proper job, and sticking to a budget, especially in these times, was another challenge. We lived without curtains in the lounge for well over a week, and as this occurred during the last cold spell in winter, I will never take for granted the effect which some linen can have on insulation!

Ultimately, my wife and I thought of ourselves for a change. After spending so many of the recent years focussing on the children and their comfort, we lost sight of the fact that this was our house too, and we needed to be happy. The changes we have made have given our house a new lease on life, and we are appreciating it again after overlooking it for so long. We now fully appreciate the term 'house proud', and when it is safe to do so, we look forward to welcoming friends and family back into our home.

Gregg

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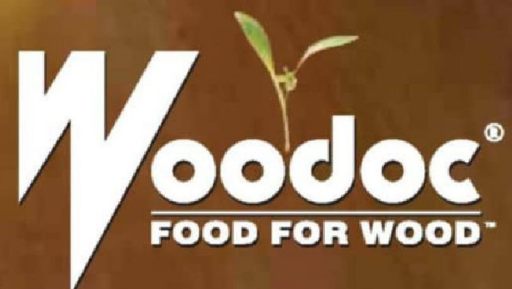


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True beauty comes from within. That's why Woodoc Deep Penetrating Furniture Wax deep penetrates even through existing surface finishes to nourish the wood below. It enhances the natural grain and inner beauty of wood while it cleans. Simply wipe it on and rub lightly with a soft cloth. Woodoc Deep Penetrating Furniture Wax will make the surface glow and not change its protective qualities.

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OFF THE SHELF

Your guide to the latest products in the world of DIY

Get perfect hedges

The new Makita Cordless 18V DUH602Z Hedge Trimmer with its brushless motor is here, ready to get your hedges in perfect shape this summer with the minimum amount of effort, providing performance without the hassle of a petrol model



Features of the DUH602Z include: A rotating rear handle that can be adjusted 90 degrees both left and right and an anti-vibration structure that reduces the vibration felt by the user, providing both comfort and ease of use. This model has a 21.5mm maximum cutting diameter and three different variable speed controls, as well as a blade release function that reverses the blade if it jams.

The blade length is 600mm with a maximum cutting capacity (strokes per minute) providing you with 0-4400 on high, 0-3600 on medium and 0-2000 on low.

The batteries and charger are sold separately.

For more information, call 011-878-2600 or visit www.makita.co.za or www.facebook.com/MakitaPowerToolsSA

Ultra-safe innovative woodworking jigs and tools

Microjig is the leading brand of technically advanced wood working safety jigs, equipment and tools that could save you from a serious injury

Every nine minutes, someone is injured by a table saw because of a finger too close to the blade or having a faulty push stick. Microjig recently launched a complete solution of tools, jigs and equipment aimed at halting all table saw injuries, from kickback to finger amputation. They have since become an international leader in table saw accessories, with Grr-Ripper recently unveiled. The Grr-Ripper kit has everything a woodworker needs to create projects with top-to-the-line precision, safety, and control. Microjig now has a new comprehensive range of technically advanced accessories and products, a range covering all the tools, equipment and jigs required by the woodworking/sawing industry.

The Microjig product range starts with all the popular key models and accessories:

- Ggr-Ripper 3D Push Block
- The Grr-Ripper Advanced Model
- Perfect-fitting dados
- Smart Tapers
- Make your cut with the Microdial
- SteelPro splitters
- Fool proof installation into your Zero Clearance insert (ZCI).
- MJ Splitter SteelPro
- Hassle-free miter bars
- Zero play
- Zero Play Miter Stop
- Build custom hold-downs for T-Track miter slots.

Microjig aims to make it safer and more intuitive for people to succeed at their passions and build their dreams. The company is on a mission to end all table saw injuries by the end of 2020.

For more information, call 011-314-7711 or visit www.vermontsales.co.za



Aesthetically pleasing and efficient to enhance every garden

The Pioneer Plastics' 500l rainwater tank is the perfect addition to every garden and outdoor space

With our country's great summer climate, South Africans look forward to spending their time outdoors enjoying the warm weather in their garden. However, a gorgeous garden requires work, especially when it comes to keeping your garden watered.



The problem with rainwater tanks is that they are often not very pretty and need to be tucked away out of sight. Pioneer Plastics' 500l rainwater tank is in fact a plant holder with the ability to harvest rainwater making it the perfect solution as it will blend in with any outdoor space.

Its sandstone colour complements any outdoor colour set up, and its 20mm brass tap completes this pleasing look. This product is also made of a 100% recyclable UV stabilised material.

The rainwater collection system is a simple collection and storage system that utilises an attachment onto your gutter to collect rainwater which is then stored to be used when needed. The integrated plant bowl has a built-in drainage pipe, ensuring it does not contaminate the stored rainwater.

A leaf catcher is provided as part of the system to prevent debris from the gutter from falling into the tank, while a gutter cover aligns the gutter pipe above the tank.

The rainwater tank itself has an inner black lining to prevent algae growth with an overflow and an outlet at the bottom of the tank which can be connected to a water pump. For easy access to the tank, it also has a tap.

The Rainwater Tank weighs 18kg, is 850mm (length) x 850mm (Width) x 1,480mm (Height).

For more information, visit www.pioneerplastics.co.za

The strongest exterior paint yet

Plascon Micatex, the strongest exterior paint, now contains Polycell for even more strength, toughness and protection



The trusted and proven duo of mica for stretch and marble for strength has made Plascon Micatex South Africa's favourite exterior paint choice for decades. Now there's a new duo that's even tougher – Plascon Micatex with Polycell.

Fixing hairline cracks is painstaking and time-consuming – a nightmare for homeowners, let alone the contractors who have multi-storey buildings to paint. All textured paints claim to cover hairline cracks – but how can you be sure that they really do? Only Plascon Micatex is now formulated with Polycell Fine Crack Filler, so you can be 100% sure that new Plascon Micatex with Polycell will cover all hairline cracks, all the time! And by securely covering all hairline cracks, Plascon Micatex prevents damp, a very common problem on exterior walls, by retarding water seepage through the hairline cracks. Your walls will stay dry and protected and have that 'just painted' look for 12 years with the Plascon Micatex quality guarantee.

For more information, visit www.plascon.com

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**Chris
Mans**

wins a Makita MT M8100B
Impact Drill courtesy of Makita

Prizes are not exchangeable

The joy of working with biscuit joiners

WINNER

With reference to Denis Lock's article "Make the most of your biscuit joiner machine", from the latest issue *The Home Handyman*, I wish to inform you about my experience of my biscuit joiner machine.

I am doing woodwork as a hobby and bought my biscuit joiner machine years ago. The money which I have invested in the machine was worth it. I have sent two photographs of projects that I have done with my machine which are in my opinion the best.

My first project was a cabinet for my wife to do sewing with her sewing machines. It is made from pre-paint MDF board. It has two tops for the machines which can be pulled out when doing sewing and two drawers and enough space for other stuff as can be seen in the photo.

I have made a few bookshelves from laminated SA Pine (master board). It is very easy to join the parts with a biscuit joiner and a handful of biscuits. In one of my bookshelves, one of the shelves was too short and instead of buying a full sheet, I extended it with an off cut (I do not have a finger joint machine which is used in factories). I joined the two pieces with a few biscuits and the biscuit joiner. In the case of laminated pine, it was a perfect joint.

Other projects which I have made with my machine are TV cabinets, a computer workstation, bathroom cupboard, etc.

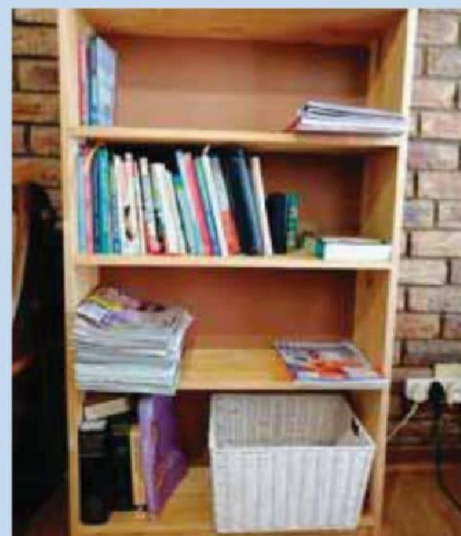
I didn't have any formal training on the machine, but have learnt a few tricks when using it. What works for me is to start the machine before putting it into position and I agree with what Denis

said; to use both hands and make sure the machine is firmly on the work piece.

I have been a subscriber of *The Home Handyman* for many years now and I want to thank Denis for his contribution to the magazine which is done in a professional way.

Chris Mans, Klerksdorp

Ed replies: Thank you Chris for your email and for sending through the photographs of your work – it is always great to see what our readers can produce. And I agree with you regarding Denis Lock – it is a feather in our cap to have a woodworker of his calibre on our editorial team.



An update on my grandfather clocks

In the May/June 2020 issue of *The Home Handyman*, I noted in my letter that I was busy restoring two old clocks that were given to me after being found in a backyard in Retreat in Cape Town.

The first clock was a Grand Daughter Clock with its original coronet mechanical movement, while the

second is a Grand Father Clock with the hood missing. I just wanted to send you some photographs of the finished clocks.

Gabieb Allie, Athlone

Ed replies: *Those are two fantastic restoration jobs Gabieb, congratulations!*



Safer cutting

I would like to congratulate the designer of the Lego coat rack featured in your September/October 2020 issue. It is simple yet elegant. I must, however, add a word of warning. Cross cutting round stock like dowels, broomsticks and tree branches on a compound mitre saw, radial arm saw, table saw or bandsaw is a dangerous procedure. When cross cutting square or rectangular stock two flat surfaces are firmly positioned against the table and fence or table and mitre gauge. When cross cutting round stock on these machines there is minimal contact with the fence, table or mitre gauge. The slightest catch by the saw blade will cause the stock to spin resulting in pinched/bruised fingertips

or worse. A V-shaped cradle should always be used when cross cutting round stock. The photo shows an example of such a cradle. This is what I use when cutting slices (oysters) from round tree branches. It allows a much firmer grip on the piece being cut.

The Home Handyman contributor, Denis Lock



Reader's projects



The Home HANDYMAN

www.homehandyman.co.za

Willing to share your latest project with our readers? Send a step-by-step write up of how to make the project, along with step-by-step photographs (at least 300kb) and a picture of the finished product.

Email projects and photographs to:

editorial@homehandyman.co.za



Our competitions – the fine print

Prizes may not be exchanged for cash. The closing date is stipulated by the competition box. If not stipulated, it closes on the last day of the issue. For example: Jan/Feb edition. All competitions close on the last day of February. To enter simply e-mail your answer to: editorial@homehandyman.co.za and include your name, surname, address and a day time contact telephone number with your entry. Unless otherwise stipulated, competitions are lucky draws and the correct entry drawn on the closing date will be the winner. The prize may differ from the picture shown. By entering this competition you agree to all rules and accept that the decision of the publisher is final and that no correspondence thereto will be entertained. This competition is open to all readers of *The Home Handyman* except employees of THH, BB Print and employees who work for the company that sponsors the prizes and their immediate families. Prizes not claimed within 60 days will be forfeited.

Hobby-X has an exciting new owner

Messe Frankfurt South Africa, a subsidiary of one of the world's leading trade fair organisers, is proud to announce the acquisition of Hobby-X, the premier event for the hobby, arts and crafts supplies sectors in South Africa.

In March 2020, Hobby-X celebrated 23 years. It is a visual, interactive, creative and entertaining event. In 2020, the event featured around 140 exhibitors across the hobby, craft and leisure industries and welcomed more than 14 500 trade and public visitors. The first Hobby-X edition under the new owners will take place from 4 to 7 March 2021.

"We are convinced that Hobby-X is a great addition to our South African events portfolio. It shows that even with the currently challenging market conditions, we do invest in the future and believe in personal encounters", says Detlef Braun, Member of the Executive Board, Messe Frankfurt.

"Expo Trends, former organizer of Hobby-X, has done an incredible job of establishing the show as a solid platform for independent business owners to find suppliers and source relevant products for their stores. For hobbyists and crafters, Hobby-X is the place to find all the equipment, supplies & ideas they need to take their hobbies to the next level. Lockdown has seen many more people turning their hobbies into income generating opportunities as well as pastime activities and this platform satisfies that need. Messe Frankfurt is excited at the prospect of taking this event to the next level," says Joshua Low, Managing Director of Messe Frankfurt South Africa.

"We are delighted to be working with Messe Frankfurt and are confident in their ability to take the show to new heights. With a strong consumer show portfolio and the experience of organising events in related industries, we believe Messe

Frankfurt to be the organiser of choice and ideal partner for this event," says Elizabeth Morley, CEO of ExpoTrends.

"We pride ourselves in putting together high standard events with a strong complement of resources across the sales, marketing and operations disciplines. We have exciting new initiatives planned for the event including a significant additional investment in marketing and content. We believe that there is great potential to add new elements and solidify Hobby-X as the premier Hobby, Craft and Leisure event in the country," concludes Low.

For more information, visit www.hobby-x.co.za



Papini Accessories and Silk House open Sandton showroom

Two great value for money brands, Papini Accessories and Silk House, have come together to increase their footprint in the decor industry by opening a showroom at Kramerville Corner, in Kramerville Sandton.

Founder, Mr. Patel commented at the recent opening that, "Our customers made this showroom possible. It is because of their support and encouragement that we have taken this next step. We firmly believe that design does not have to be expensive. We have 30 years of experience in designing and importing quality products at a good price to meet the needs of the South African market." The showroom allows the full range of both



the Silk House and Papini Accessories brands to be shown off.

The focus is on creating a space in which the visitor is inspired, and there are many style pods, designed by an

interior designer, to express some of the latest decor looks. There is everything on hand to pull a new look together in an inviting setting. The large swatches of fabric allow one to see the full design of the patterns, tricords, show off various wallpaper designs and there are rods, tassels and trims in every colour. Consultants are on hand to guide the visitor through the process and share insights on the products.

Kramerville was chosen as the location for the showroom as it is recognised as the place to go for those who are fanatical about home, decor, and design.

For more information, email info@papini.co.za

Tips to reduce your electricity bill

It was unwelcome news for South Africans to hear that electricity prices will increase by 15% next year. With more increases on the cards it seems.

Most people are very familiar with that sinking feeling of having to top up their pre-paid electricity metre yet again for the umpteenth time in a month. Your electricity bill is one of those expenses that can easily get out of hand and with price increases on the horizon, now is the time to look at ways to reduce your electricity consumption and save money in the long run.

Orlando Luis, CEO of Brights Hardware – a chain of family owned hardware stores based in the Western Cape – offers some tips on how to reduce your electricity bill every month.

“Firstly it is important to know where is your biggest electricity usage in the house. Without a doubt, geysers use the most electricity, accounting for nearly a quarter of your consumption. Following this is heating and cooling which uses about 18%, then lighting which uses about 17%. Surprisingly, appliances and electronics that are on standby use as much as 15% of your electricity, and then there is the oven which accounts for about 11%. Other smaller electronics and gadgets account for the balance of your use.”

Install a gas or solar powered geyser

“With geysers using the most amount of electricity, it makes sense to look for alternatives such as a gas or solar powered geyser,” says Luis. “When it comes to solar geysers there are many different sizes and technologies that range in capacity and price – depending on how much water you use, your budget etc. Solar geysers may cost a bit more to install initially but the long-term benefit is well worth the capital cost upfront.” There is also a wide variety of gas geysers on the market and the benefit with gas is almost instant hot water.

Put a timer on your geyser

According to Luis, if you do not want to replace your current geyser system, there are ways to make it more energy efficient. Such as putting a timer on your geyser. “You only need hot water at certain times throughout the day, and if your geyser is left on all day every day then your electricity bill will be higher than necessary. Install an electronic timer which can be programmed to only heat up when you need it to.”

Replace old light bulbs with LEDs

“One of the quickest and easiest ways to save money is to use energy efficient lighting. Simply replace your old light bulbs with energy efficient LED ones,” advises Luis.

Change to a gas stove/oven

“Electrical ovens use a huge amount of electricity. Rather change to gas, which is cheaper to use and creates heat in an instant, unlike electric stoves which take some time to heat up. Gas stoves and ovens are also great to have during load shedding and mean no interruptions to food preparations.”

“If this investment seems a little out of your price range, consider getting a gas cylinder with a cooker top attachment which you can use instead of the stove plates.”

Replace old appliances with new energy efficient models

“New appliances are made with the goal of being energy efficient and eco-friendly and so replacing old appliances with modern ones that have an energy consumption rating will save money. Old household appliances use up to 40% more electricity than an Energy Star appliance.”

For more information, visit www.brights.co.za

Hamilton's Guide to THE PERFECT FINISH

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- ENGLISH BRUSH**
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FOUR ELEGANT COLOURS: [Color swatches]

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HOW TO RENOVATE A GARAGE IN A FEW EASY STEPS

One day when you are looking for something important and you cannot find it, but you stumble upon many things that you don't recognise. That is when you realise your garage needs a renovation.

People have different reasons to organise their garage. Removing the clutter and making the space look more organised is one of the most common reasons for renovating the garage.

The other reasons may include redoing the floor if it's damaged or is old enough for a replacement. Some people may use the space for other purposes like making the garage a multifunctional space. For that, you can add storage compartments in there.

Garage renovation tips

Now before we start how to renovate a garage, here are some helpful tips for your benefit:

- You can simply make your garage more organised by installing custom steel cabinetry system with lockers. Or you can convert the garage into an extra room with extra space for the car.
- If you are trying DIY, make sure that you are comfortable handling the

entire process which may include some heavy lifting and using tools like drills and screws.

- You can always seek the help of the professional in case you are unable to finish the project. Professional renovators will do the job much more efficiently, but it doesn't mean you cannot.

Step 1: Evaluate your needs

Organisation means nothing without function. Start by listing goals for the garage. Do you want to have room to park the car? Do you need a workstation for projects? Or maybe you would just like to actually find the Christmas lights without opening 10 boxes. Don't make your goals too complex or impossible to maintain (like rotating boxes of seasonal items every holiday). A list of goals and priorities will make it much easier to maintain.

Step 2: Move the junk

Chances are that you may have a lot of junk in the garage. You don't realise this

when the stocks are piling up. Remove everything from the garage and then sort them out one by one. This will help you get a clean and junk free space to start working on. Decluttering is the first step to garage renovating.

- Throw the things you don't need or it cannot be used – broken bicycle, lawnmower, damaged and mouldy boxes and other stuff.
- Have a garage sale for things that are in good condition, but you don't need them. You might not need that chair, but someone else might.
- Keep things that you can use for your new garage space.
- You may actually find that some of the things in your garage are actually better stored somewhere else. Finding a better home for things that randomly end up in the garage by default will leave you with even more open space.

Step 3: Prepare your garage for the redecoration

The next step is to prepare for the

makeover. You need to clean up the space if it's needed. Make sure the floor area is clean:

- Remove everything that is not cemented to the ground and is not out of sight.
- Remove any kind of fixtures on the floor and walls – sinks, carpets, cabinets, wall hangings, nails, hangers and other things
- Make sure that your garage door is working properly before you get started with the renovation.

Step 4: Do the floors first

The first thing you need to do is coat the floor. The floor is the most functional part of the garage and before you add any functionality you need to get the floors right.

- Choose the kind of coating you want. If you really need to redo the entire floor make sure you know what you are doing. Alternatively, ask professional floor installers to do the job.
- You can use the garage floor kits available in the market which come with detailed instructions to help you coat the floor of the garage with perfection.
- Make sure that any uneven surface on the floor is taken care of and any damage done to the floor is repaired.

Step 5: Add storage space

One of the best things you can do when renovating your garage space is to add some storage cabinets in there. With cabinets and storage shelves, you

can individually store your things like garden tools, and golf sticks in different compartments. This will make finding them easier when you need them.

- Adding storage system make your space more efficient and organised.
- Add hooks and wall shelves for storing things.
- If you will be using the space for other things like doing another DIY project, then make sure you divide the space and clearly mark the areas that things don't get mixed up.

After getting rid of all of the items you could throw away, donate or sell, or relocate, the job of organising the garage will already seem much more manageable. Sort everything into categories, for instance:

- Lawn/garden
- Outdoor toys and sports equipment
- Camping gear
- Rollerblades, boots, and shoes for hiking/muddy situations
- Cleaning supplies
- Ladders

Step 6: Maintain

Yes, maintenance really deserves to be its own step because it is probably the most important of all! What is the point of cleaning and organising if it falls right back into disarray? First, make sure you follow-up on any items that don't belong in the garage such as the donation, garage sale, and the "I'm saving this for whoever" piles.

Converting your garage?

Converting your garage into a spare room adds more living space to a home, often without the expense of major structural changes. Whether you need a playroom for the children, a teenager's bedroom, or a home office, changing your garage can do the trick.

With attention to walls, a heating/cooling source and a new floor, what was once space for the family car can become the family room for all to enjoy.

Remove the garage door, unless you plan on installing a dry wall, sliding screen or glass door. Build a wall that closes in the garage-door opening, incorporating a window if it is part of your design plan.

Add a closet, or if it is part of your plan, a bathroom at this stage of the renovation. Install lighting that matches the rest of the house. Paint the inside of the room. Next, either install carpet over the concrete floor or create a new floor of laminate or tile. Decorate the new room with your theme and add furnishings.



Creating your own DIY shelving is a handy way to add storage space to your garage



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Creating 'zones' once everything is organised will make them easily accessible. To figure out where each zone should be located, ask yourself a series of questions...

Which items need to be able to get out of the garage most easily?

The answer to this question would determine which categories of items need to be stored closest to the garage doors.

Which items need to be able to get into the house most easily?

The answer to this question will determine what needs to be kept close to the door going into the house.

What do you need to be able to access often? What do you only need to access occasionally?

Ideally, every single item in the garage would be within reach, but since garages typically have some useable vertical

space, there are some items that are going to end up being up high and out of reach. When deciding what goes where, try to keep the items you use often (like lawn and garden tools) down low and items you use only occasionally (like camping gear) on the higher shelves.

Does the layout of the garage necessitate any special considerations?

Sometimes the shape of the garage will cause some limitations when it comes to storage. Make sure to take the layout into account when planning your 'zones.'

Can the cars pull in easily and have enough room to comfortably open the doors?

Since one of your main priorities will probably be to park a car or two in the garage as well, make sure you can do this comfortably. In order to park cars comfortably, make sure that any shelf or hanging units you choose don't jut out past the rail for the garage door.

Garage makeover in pictures

Blogger Jane Ko shows you her garage renovation:

Before you say, "Jane, you painted your garage? Really?" In the past four years, I've been slowly adding more and more items to the garage and before I knew it, it just became a mountain of junk. It was an eyesore every time I pulled into the garage to park my car and I was so embarrassed when neighbours would walk by and peek in. It was my number one goal this year to take the garage and give it a fresh makeover. Purge, clean, and organise.

You can see what my garage looked like beforehand... Piles and piles of products, boxes of product, old appliances, old furniture – it was a miracle that I could find anything.

I started by making a plan of my garage so I could visualise the space and make sure new shelving would fit. By measuring the walls and ceilings, you can estimate how much paint you'll need to buy too.

Shelving systems are my top choice because of the easy installation and customisation. The final photo of the garage makeover says it all! All the clutter is gone and in its place, a bright, clean, and organised space! I installed hang rails and shelves to hang up items like the tennis racket and a pool floaty!

Every time I come home and open up the garage, it's like a giant burst of happiness from the yellow!



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Preparation

- Treat damp walls - not wet ones!
- Repair cracks before covering with DampLoc
- Ensure substrate is sound
- Replaster if necessary
- Proper preparation results in a professional finish

Application

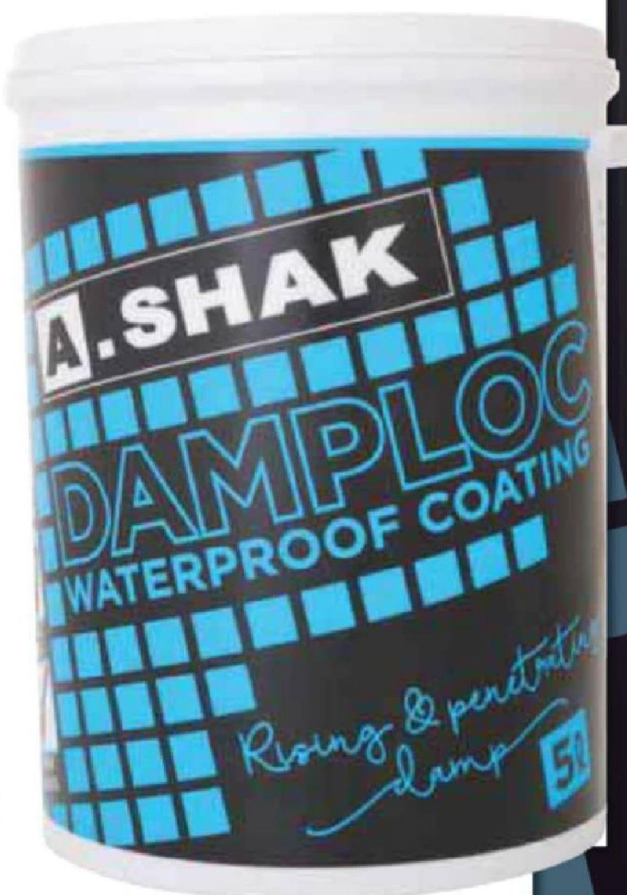
- Stir well
- Apply two coats
- Paint from bottom to top
- Each coat in criss-cross to the previous
- Allow 24 hours for first coat to dry
- Clean brush with water after use



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Learn how to build a bench with built-in storage.



A HANDY ADDITION

Whether you need seating in a hallway, a bedroom, or even your living room, this bench makes a beautiful addition. The upholstered cushion is comfortable and allows lots of customization options, and the storage compartment is handy. Kreg shows you how to make one from four maple boards and a half sheet of plywood.

Tools and supplies

- Drill/Driver
- Pocket-hole jig
- Adjustable square
- Sander
- Miter saw
- Utility knife
- Iron
- Scissors
- Stapler
- 40 x Kreg 32mm fine-thread pocket-hole screws
- 16 x Kreg 32mm coarse-thread pocket-hole screws
- 14 x 38mm flat-head wood screws
- 1 x 7.5m (25-foot) roll maple veneer edgebanding
- 1 x Veneer Edge Trimmer
- 16 x Kreg maple pocket-hole plugs
- 2 x Lid supports
- 1 x Round knob
- 1 x Pair partial-wraparound hinges
- 1 x Upholstery foam
- 1 x Wood glue

PARTS LIST

4 x 19 x 64 x 2400mm maple		
1 x 19 x 1220 x 1220mm plywood		
QTY	NAME	MATERIAL
(4)	Legs	19 x 64 x 343mm maple
(4)	End Rails	19 x 64 x 343mm maple
(2)	Upper Rails	19 x 64 x 898mm maple
(2)	Lower Rails	19 x 64 x 1022mm maple
(2)	Box Sides	19 x 64 x 419mm maple
(2)	Box Front/Back	19 x 64 x 457mm maple
(1)	Box Lid	19mm ply x 457 x 457mm
(1)	Bench Platform	19mm ply x 457 x 1194mm
(1)	Cushion Base	19mm ply x 457 x 737mm





Step-by-step guide

Step 1: Cut four Legs to length from 19x64mm maple boards, as shown in the cutting diagram. Note that the ends of each Leg have parallel 15° angles. Measure carefully, and use a stop block on your miter saw if possible to ensure that all four legs are the exact same length.

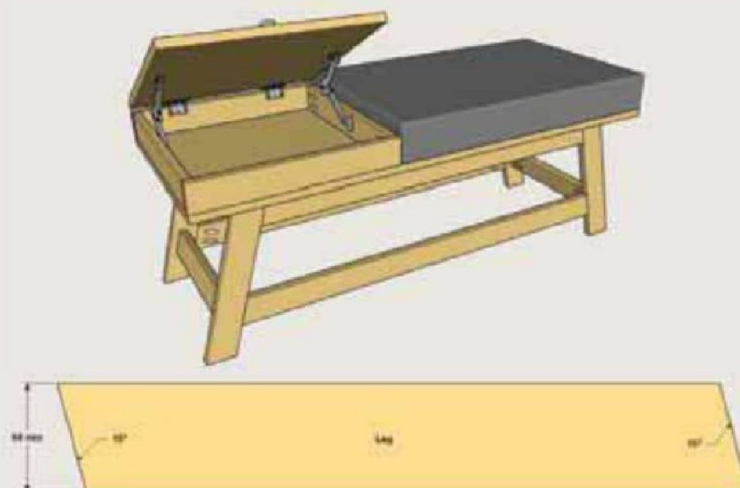
Step 2: Cut four End Rails to length from 19x64mm maple boards, as shown in the cut diagram. Set your Kreg® Pocket-Hole Jig for 19mm material, and then drill pocket holes at the locations shown.

Step 3: Cut the two Upper Rails and two Lower Rails to length with opposing 15° angles on each end, as shown in the cutting diagram. Drill pocket holes where shown. Note that the pocket holes at the ends of these rails should be drilled perpendicular to the angled end of the rail.

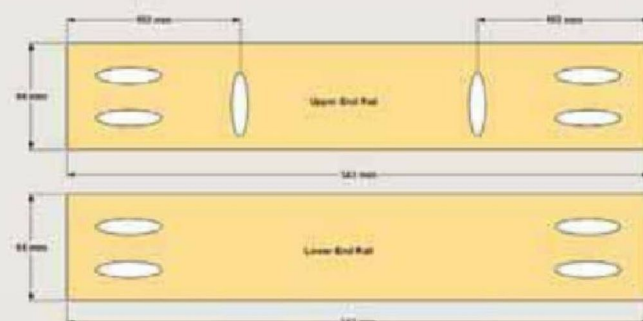
Step 4: On a flat work surface, secure two Legs to one Upper Rail using 32mm fine-thread Kreg Pocket-Hole screws, as shown. Make sure the upper end of each Leg is flush with the top of the Upper Rail. Now set the Lower Rail between the Legs at the location shown and secure it to the Legs with 32mm fine-thread Pocket-Hole Screws. Do the same process for the other set of Legs and Rails. When both leg assemblies are complete, you'll want to plug the pocket holes on the Lower Rails, since they'll be visible on the inside of the bench base. When the glue dries, sand the plugs flush.

Step 5: On one leg assembly, lay out the location of the Upper and Lower End Rails, as shown. Set the Upper End Rail in place, and then secure it to the Leg with 32mm fine-thread Pocket-Hole Screws as shown. Repeat this for all four End Rails. Once you have the End Rails secured on one Leg assembly, flip that assembly over onto the second assembly and repeat the previous step. Before moving on, glue and plug the eight pocket holes on the lower End Rails. When the glue dries, sand the plugs flush.

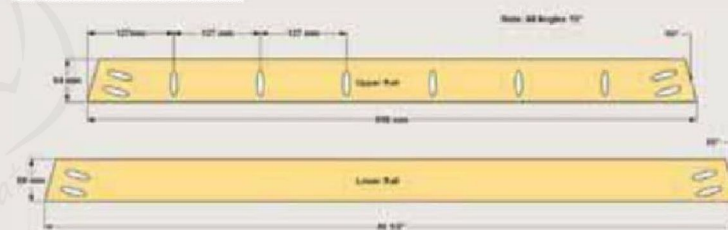
Step 6: From 19mm plywood, cut the Base Platform, the Box Lid and the Cushion Base to size, as shown in the cut diagram. Set the Cushion Base aside for now. To cover the plywood edges of the Bench Platform and the Box Lid, cut strips of veneer edge banding slightly extra-long.



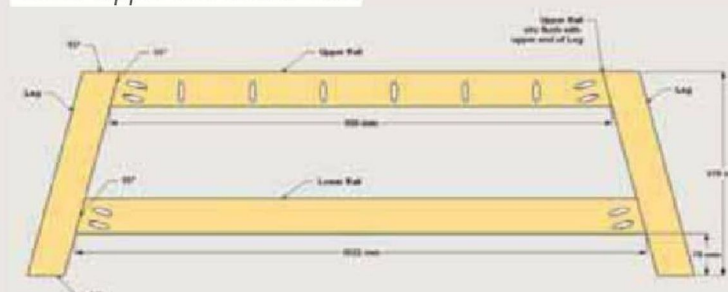
Cut the Legs



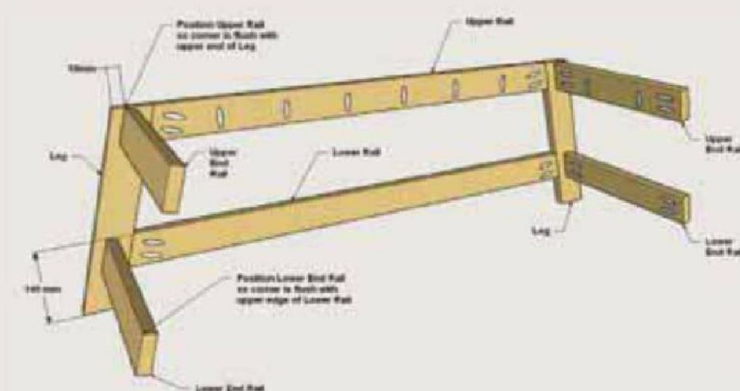
Create the End Rails



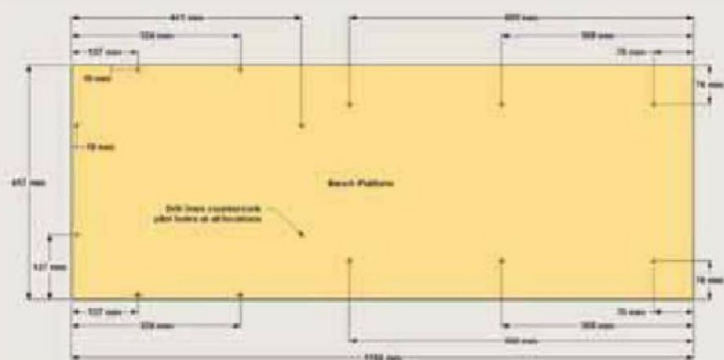
Create Upper and Lower Rails



Attach the Legs to the Rails



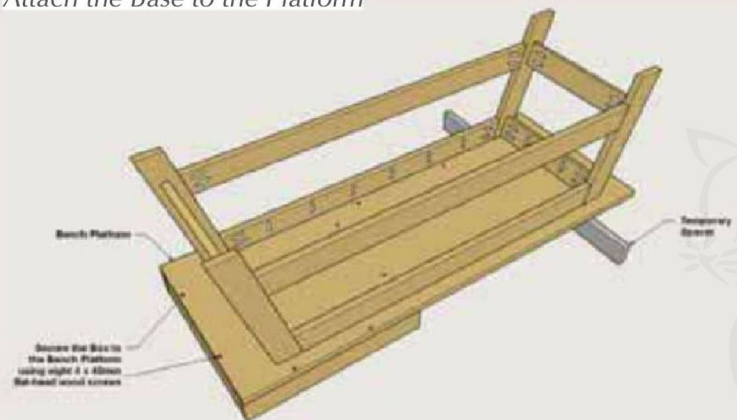
Install the End Rails



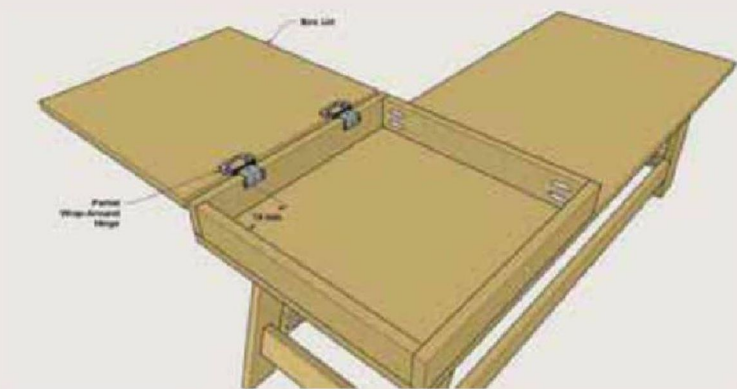
Drill holes in the Bench Platform



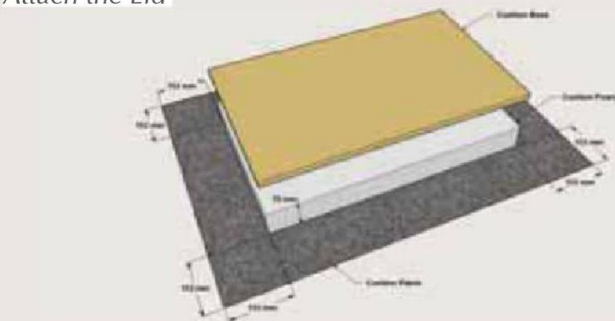
Attach the Base to the Platform



Attach the Box to the Platform



Attach the Lid



Create and attach the Cushion

Starting with the short ends, iron the edging onto the Bench Platform and the Box Lid. When the glue cools, trim the edging to final length using a utility knife, and to width (to match the thickness of the plywood) using an edging trimmer. Now complete the same procedure for the front and back edges. Gently sand the edges smooth.

Step 7: On the Bench Platform, lay out the locations, as shown, for holes that will be used to secure the box assembly and the cushion. Then drill countersunk 3mm pilot holes at those locations.

Step 8: With the Bench Platform sitting face-down on a work surface, place the base assembly in position and secure it using 32mm coarse-thread Pocket-Hole Screws. Though you used fine-thread screws for the solid-maple parts, coarse-thread screws are a better choice for attaching to the plywood.

Step 9: Cut two Box Sides, a Box Front, and a Box Back to length from a 19 x 64mm board, as shown in the cutting diagram. Drill Pocket holes in the ends of the Box Sides as shown.

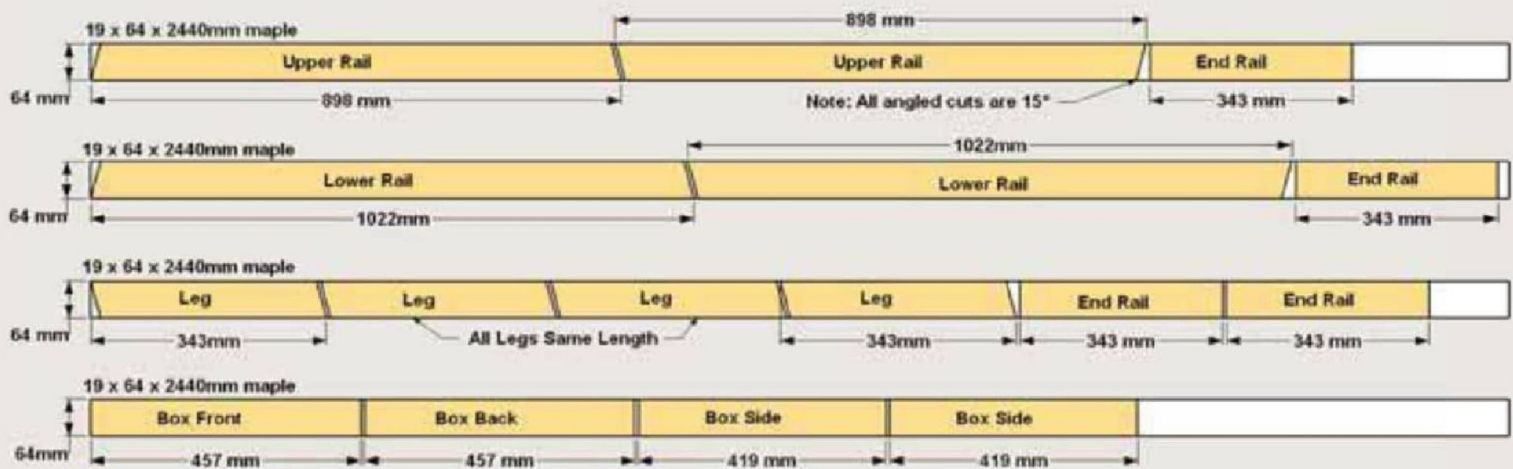
Step 10: Attach the Box Sides to the Box Front and Box Back using 32mm fine-thread Pocket-Hole Screws.

Step 11: Position the bench base assembly on the box assembly, as shown, and support the other end of the base assembly with a spacer – just a scrap of 19x 64mm. Align the box with the edges and end of the Bench Platform, and then secure the box using eight 38mm flat-head wood screws.

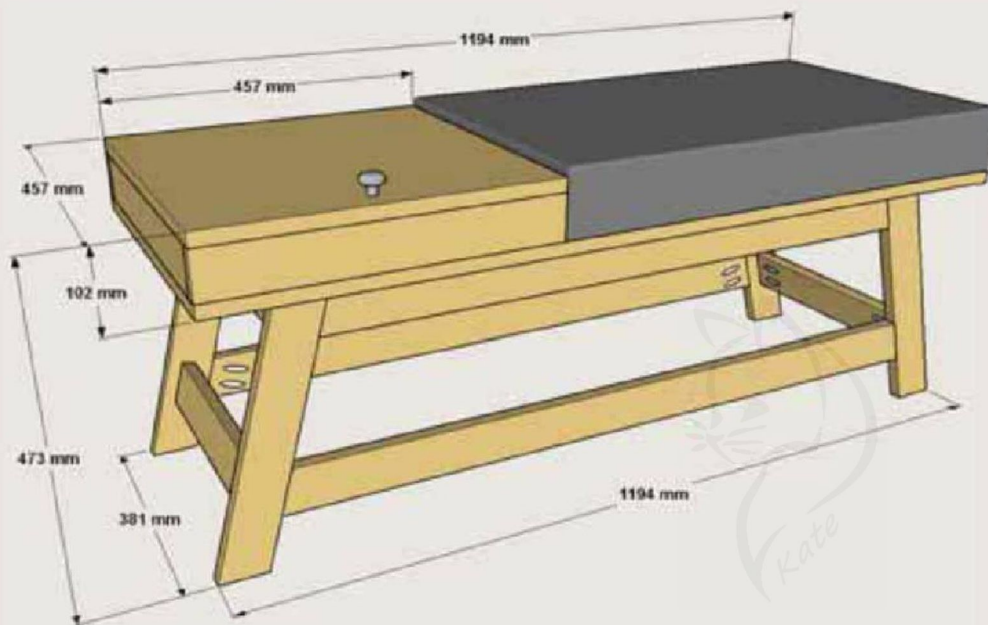
Step 12: Flip the Bench upright again, and then mark the locations of the hinges on the Box Back. Drill pilot holes, and then secure the hinges to the Box with the screws supplied. Align the Box Lid, and mark the locations of the hinges on the Lid. Drill pilot holes in the Lid, and then secure the hinges to the Lid. Close the Lid to check the fit. Make adjustments as needed. If you want to add a knob to the lid, position it where you want it, drill a pilot hole and attach it with the screw provided. Install the Lid supports per manufacturer's instructions.

Step 13: Remove all of the hardware and then sand all of the parts as needed with 180-grit sandpaper, wipe away all dust, and then and apply your favorite finish. We used a wipe-on oil/varnish blend. When the finish dries, reinstall the hardware.

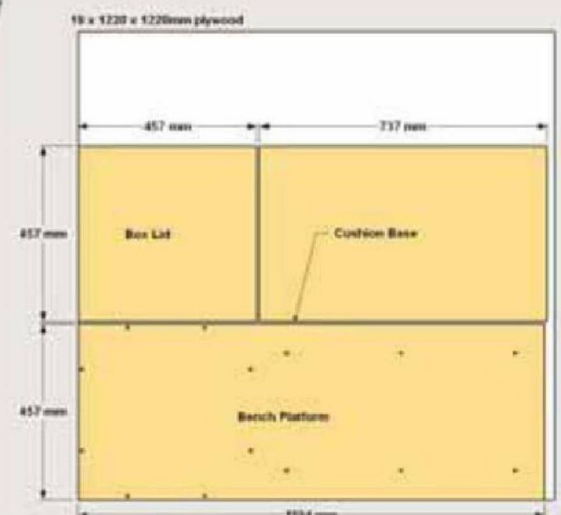
Step 14: Cut cushion foam to the same size as the Cushion Base. Cut your fabric to 300mm longer and 300mm wider than the Cushion Base. Set the fabric face down on a work surface, center the foam on the fabric, and then set the Cushion Base on the foam. Fold one short end of the fabric over onto the plywood and staple it in place.



Cutting diagram: boards



Dimensions of the unit



Cutting diagram: Plywood

Pull evenly, and place staples every 25mm or so. Pull the second side tight and secure it the same way. Next, fold one long side over so the corner is square, trim away any extra fabric as needed, and then secure it to the plywood with staples. Repeat this for the final side. Finally, set the cushion assembly on the bench so the edges are flush, and secure it from underneath with 38mm flat-head wood screws.



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Attach nozzle and shake the canister well, turn the canister upside down, spray the foam to fill about 1/3 of the area. The foam expands as it cures.

Moisten the fresh foam again immediately after application

Cut away excess foam once cured. Cover the foam with plaster or Acryl -W (Den Braven Acrylic sealant), and paint.



4 EASY WEEKEND PROJECTS FOR YOUR GARDEN

As the warmer weather is here, now is the time to get outdoors. This issue we present four outdoor projects which can be completed over the weekend to improve the state of your garden.

Create a pallet garden wall



A vertical pallet garden, using shallow rooted plants, is a great addition to a small garden. It can be leant up against a wall so that you don't lose much space.

Step 1: Gather your materials

- A heat treated pallet that's in good condition
- Planks of wood long and wide enough to cover the sides and bottom
- Builder's film (or landscaping fabric)
- Staple gun and staples
- Nails
- Hammer
- Drill
- Quality potting mix/soil
- Knife
- Plants with shallow roots... lots of them!

Step 2: Line the pallet

Using your staple gun, secure builder's film to the inside, over the back and over the bottom of the pallet so the soil can sit inside it without spilling out. Go over the back and bottom sections again to make it strong and use lots of staples just to make sure.

Step 3: Cover the sides and bottom

Nail in the planks of wood to cover the two sides and the bottom.

Drill some drainage holes into the bottom planks, making sure that it goes through the builder's film too. We put in about 12. If you wanted to, you can give it a coat of paint at this stage. We kept our vertical garden as is for a rustic and natural look.

Step 4: Position and secure it

Since mine ours going up against a fence and off the ground, we secured it

with metal wire threaded through the back at the top, middle and bottom.

Yours could sit on the ground leaning against a wall. Just make sure it's secured and safe so it doesn't fall over with a bit of a knock or gust of wind.

Step 5: Fill it with soil and plants

Fill it with soil right up to the top and pack it down firmly. Start planting on the bottom row and working your way up. Cut a small slit with a knife into the builder's film where you want the plant to go. Using a shallow solid rooted plant makes it easier to do this with.

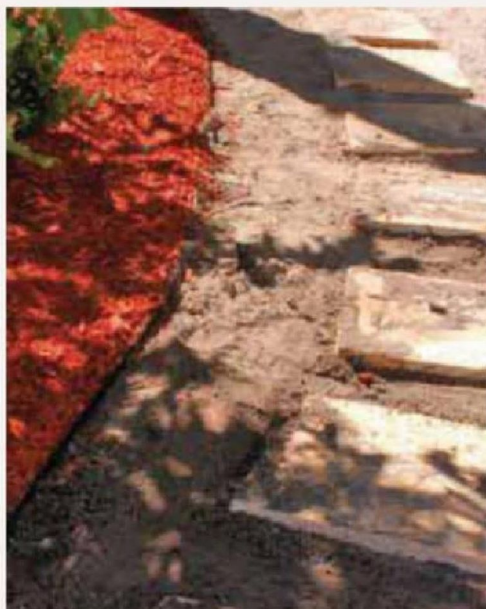
When you're done, water it in well over the next few days to help it establish its roots.

Step 6: Sprinkle with tender loving care

Keep your plants watered and fertilised as needed for the type of plant you use.



Build a stone path



A path made of stepping stones is a simple, inexpensive way to add charm to your landscape. Stone paths offer a practical route for foot traffic from the sidewalk or driveway to your front door and along the side or back of the house.

Consider your home's architecture when choosing a style of stepping stone. If there is keystone, brick or faux rock on your exterior walls, bring the same texture and colour into the stepping stones.



TOP TIP! Choose a surface with enough texture that it won't be slippery when wet, especially if the path will be near a pool. And avoid very dark stepping stones, which can become too hot for bare feet in the summertime.

Step 1: Clear and fill

Determine the boundaries of your path and remove all vegetation from the area. If you use an herbicide, apply it at least twice with three days in between. Once the vegetation is gone, put down 5-6cm of levelling sand. Drag a plank of wood across the surface of the sand to make it very level.

Step 2: Lay the stones

Set the stepping stones into the sand. Keep the surface of the stones well



above the sand, and make sure each new stone is level with the one before it.

Step 3: Level the stones

As you settle the stones into place, use a level to check each surface. When the level is parallel to the house, the bubble should be right in the middle, indicating that the stone is on an even grade. When the level is perpendicular to your house, you want to see a slight positive slope. This will allow water to slide off the stones and away from your house. This is particularly important when stepping stones are placed close to an exterior wall.

Step 4: Install a weed barrier

A weed barrier will ensure that your stone path stays tidy and virtually maintenance-free for years. Once all the stones are in place and appropriately levelled, lay the weed barrier on top. Use garden shears to carefully cut holes for

each stone. Weigh the barrier down with some pebbles as you work.

Step 5: Fill with pebbles

For a clean look, surround the stepping stones with small pebbles in a complementary, yet contrasting colour. The pebbles should be deep enough to cover the weed barrier completely, but their surface should remain slightly lower than the surface of the stones.

Step 6: Install edging

To keep the pebbles from slipping into the surrounding landscape, you'll need to install edging. For a clean, minimalist look, a narrow strip of black metal works well. For a country cottage ambience, use brick-shaped pavers that coordinate with your stepping stones. Dig a trench that allows you to place the edging material deep enough so it won't be a tripping hazard. The top of the edging should be just an inch above the pebbles.



Make a DIY garden trellis



This DIY garden trellis provides a place for beautiful flowering vines to grow and can cover up a plain backdrop.

Step 1: Gather your materials

- Flat-top fence pickets
- Table saw
- Any saw you prefer for crosscuts (miter saw, circular saw, jigsaw, or even a hand saw)
- Sander and sandpaper
- Outdoor wood stain
- Square
- Measuring tape
- Nails
- Brad nail gun (optional, but make the process much faster)

The wood you choose for an outdoor project is important. We bought cedar fence pickets, which are the cheapest source of rot-resistant wood you can find. You'll need three pickets per trellis.

Step 2: Sand and prepare

Give both sides of the fence pickets a good sanding. It's okay if they're not perfectly smooth (it might actually help the vine cling), but you want to take off any splinters on the surface.

Run each picket through your table saw to remove one rough outside edge. Place your freshly trimmed edge along the

fence, and rip three strips. Make sure to use a push stick when you get down to the last cut. Safety first!

Three of these strips will be used as the vertical supports of the trellis. You can set those aside for now. The rest will be cut down to various lengths to create the horizontal slats.

It might seem like a lot of cuts; using a stop block at the miter saw makes the process a lot faster.

Step 3: Stain your trellis

It's much easier to stain the individual pieces at this point, using a rag to quickly coat each side.

Step 4: Assemble the trellis

Once the stain is dry, it's time to start assembly! Lay out your three vertical supports, and the rest of the slats (your measurements will differ depending on the size of your space).

Mark the centre vertical support with a pencil, then mark the centre of your slats. Line up the bottom of the shorter slat with the mark and centre it. Check that everything is square, then nail it into place.

The outside vertical supports are roughly 30-40cm apart. Use a board flat against the bottom to keep the ends even. Once you have them in the right spot, put one nail in each side. You'll need to pivot the top of the supports to get the right angle.

Place the longer slats 7-10cm down from the top of the side vertical support. Then measure 10cm in from the ends of the slat, and line that mark up with the edge of the support. Nail in place.

Then mark the middle of the slat, and line that up with the centre vertical support. Check for square and nail into place. Now you can go back and securely attach the bottom slat that only has one nail.

That's the hardest part! The next part is so much easier if you have a piece of scrap wood to suit your measurements. This scrap is used as a spacer between the slats, and makes assembly a breeze.

Mark the bottom edge of the next slat and place the spacer above the bottom slat, and lay the slat with your mark lined up with the edge of the vertical support. Nail in place, move the spacer, and attach the other slat on the other side. Keep alternating sides while adding more slats until you get to the top.

Step 5: Install the trellis

Once your DIY trellis is assembled, out to the garden it goes! You can choose to simply lean it against a wall or siding, but we decided to mount it with a few nails through the vertical supports. If you want to give the vines a little more room, you can add additional spacers to raise it off the wall.

Give your vines a little hand getting started by weaving them through the bottom slats of the trellis. Soon they'll take off and cover the entire piece with beautiful blooms!



Build a tree swing



All kids want to fly, and every time they ride on a swing they get closer to that Peter Pan moment. But you don't need a whole playground to feel the spring breezes swoosh by. All you need to make a disc swing is a seat, a rope, and a sturdy tree.

Making this swing requires few tools and the seat is inexpensive – you can even make it out of scrap wood. Quality hardware and rope increase the cost but are important for safe swinging. In one morning you can put the parts together, get the rope in place, and start your magic ride!

This disc swing is made from a single hardwood board and comes together quickly. The whole assembly hangs from one rope tied around a tear-shaped metal holder called a thimble. The thimble keeps the rope from fraying as it swings on a carabiner, or spring clip, hooked through an eyebolt, which is threaded through a strong tree limb.

It's important that the limb the eyebolt goes through is at least 20cm thick and very healthy so that there is no chance it will break under the weight of a child swinging.

Step 1: Making the swing

Using a tape measure and a combination square, measure out the three pieces of the swing on your wood – depending on the size of your child/children. We used two sections for the seat and one support brace that goes underneath. Clamp the wood tightly to a worktable. Using a jigsaw, cut the three pieces from the board.

Run a thin bead of wood glue on the long edge of one of the seat pieces. Fit it side by side to the other seat piece, then clamp them together. Allow the glue to dry. Glue the support board across the seam in the middle of the seat bottom, with the long edges of the board perpendicular to the seam. Clamp the pieces together. Drill eight pilot holes through the support. Each long side of the support should have four evenly spaced holes, two on each side of the seam. Attach it to the seat with screws.

Flip the seat so that it's faceup. Draw two diagonal lines from corner to corner, making an X. As if cutting a pie, draw another X over it, for eight equal slices. Put the point of a compass at the centre, then draw the largest circle that will fit on the seat.

Clamp the seat to the worktable. Using a drill/driver fitted with a spade bit, drill a suitably sized hole for the rope at the centre of the seat. Using a jigsaw, cut out

the seat shape. Halfway through the cut, you'll need to unclamp the seat, turn it around, and clamp it again before you finish making the whole circle.

Using a random-orbit sander, smooth away splinters, and round over any sharp edges. Using exterior latex paint, brush the background colour onto the seat. Coat the entire surface – top, bottom, and edges – to seal the wood. Allow the paint to dry.

Step 2: Attach to a tree

Pick out a tree with a healthy limb that's parallel to the ground and at least 20cm thick. Make sure there's room for the seat to swing freely without hitting the tree trunk. Using a long spade bit, drill a hole vertically through the centre of the limb.

Thread an eyebolt through the hole so that the eye faces down. Slip on a washer, then two nuts, one after the other. Use a wrench to tighten the two nuts as you hold the loop of the bolt steady with a screwdriver.

Tie one end of a long rope into a bowline knot around a thimble. Connect the thimble to the eyebolt with a carabiner. Slip the dangling end of the rope through the hole in the seat. Tie a figure-eight knot under the seat so that it sits at a comfortable height for the kids. Now you're ready to fly on your new disc swing!





It's all in the technique

Whether you are looking for a quick refresh or a total overhaul, these painting techniques will provide you a lot of inspiration to add style to dull walls.

Picture any room in your home and we can guarantee that the walls didn't make much to your imagination. Well, the reality is, that we spend most of our time worrying about things that are between them. Yes, we are so busy fussing over furniture, fabrics

and, accessories, that most of us forget how impactful our walls can be. And yes, when it comes to the walls, it's just not the colour. Painting your walls is much more than just deciding on the paint colour. A few interesting and decorative wall painting techniques when mixed

with your favourite colour combinations can make the walls of your home visually much more interesting and attractive.

We've gathered a collection of amazing wall painting techniques that would dress your walls up elegantly.

Strié

Strié, is the French expression for streaking. It is one of the most stunning wall painting techniques that creates a look which resembles linen material. Yes, Strié technique creates horizontal or vertical lines with paints which adds this stunning warmth and amazing texture to your space. The best thing about this style is that it sensibly blends with any panache.



Taped

Did you know? A painter's tape is a great tool to create amazing painting styles.

Yes, beyond merely covering the areas you don't want to paint, it can be used to create "Taped" painting style and can create amazing patterns like chevrons, stripes, and interlocking squares.



Colour wash

This is one beautiful painting technique that adds texture and depth to a living space. A colour wash adds a soft and warm appearance by using the layering of two dissimilar colours. Apart from the aesthetic factor, this technique is very simple and easy to apply and also

pocket-friendly as compared to other painting styles.



Sponging

Sponging is a painting technique which opens up wide doors to creativity. Well simply put, this technique involves the use of a sponge paint roller or a simple sponge to add dynamic textures and visual punch to a plain-colour wall. This technique is very easy to execute and doesn't demand specific painting skill or expertise, more than that this painting style is quick, easy and difficult to mess up.



Rag rolling

Rag painting produces a soft, textured effect, creating visual interest in any room where it is applied. This painting technique involves rolling a rag up and down wet painted walls to add a unique depth and texture. This kind of painting style is normally seen in small rooms like bathrooms, where the soft textures can help in masking the dimensions of the room and making it feel little less cramped and appear spacious.



Ombre

A wall having Ombre painting style begins with a single paint colour which slowly melts into another. This creates a totally dreamy, water-coloured upshot as it covers the range between two colours. Simply put, Ombre creates a fading effect, typically a dark or rich shade, fades gradually from side to side or top to bottom across the wall. This interesting effect demand just two main shades of paint, i.e. your main/original colour + white.



Wall stencilling

Wall stencilling is one great alternative to expensive designer wallpapers. This is one of the most simple and easy ways to add the tinge of sophistication and intrigue to space without much cost. Wall stencils are a great money-saving substitute to wallpaper or vinyl decals. Simply put, these are a quick, easy, and inexpensive way to customize and update the walls of your house with paint.



Striping

Stripes are an ageless decor staple which always looks fresh and their elegance and classiness never allows it to go out of style. Striping is a great decorative technique which tends to add a fun element to the space. In addition to that, there are many different ways to incorporate stripes. Horizontal or vertical, thin or fat, and light or bold contrasting stripes are just a few to name.



Harlequin

For a sophisticated, vibrant and contemporary feel, the classic harlequin is the best option. This wall pattern instantaneously adds life and movement to any room design and works pretty well in the kitchen and master bedroom. The basic idea to get this technique right is in choosing the right colours, select colours with subtle contrasts, or opt for higher contrasts in bold hues.



Checkerboard

This painting style is about adding some personality to a blank wall with squares. Painting your walls with a checkerboard pattern will add in a whole lot of life and style to space and also eliminates the need to add décor. In addition to that, there are several ways to do it, paint checkers in similar neutral colours, or make a stylish splash by opting for bold contrasts.



Polka dots

Polka dots are an awesome decorative painting style for your walls. Polka dots are an all-time-favourite and their craze really never comes down. When it comes to adding them to your walls, these are very easy to apply and they instantly punch up any space they added to. So, if you are looking to make a room more playful and bolder, you should definitely try polka-dots.



Follow these tips for a summer full of fun in the pool.

Dogs often love to jump in after their owners and play around in the pool, but chlorine isn't good for canine companions

SUMMER POOL

care tricks

The idea of having a pool in your own backyard will always be incredibly glamorous. It's easy to give into daydreams of hosting weekend parties, adopting an invigorated fitness routine that includes laps after work, and spending long afternoons lounging poolside while cultivating the perfect tan.

But, in those daydreams, one crucial element of pool ownership is often forgotten: the maintenance. Without a proper maintenance routine, your pool could succumb to a variety of less-than-luxurious conditions – green water, broken filters, and algae build up, just to name a few. And, no one wants to lay by a pool that's seen better days.

Here are eleven pool maintenance tips that you need to try right now. Whether you've just opened your pool for the very first time or you've been a proud owner for years, check out these tips to get your summer season off to the right start.

Think of the filter as your pool's kidneys

Just as your kidneys are constantly working to remove impurities from your body, your pool's filter is responsible for removing impurities from the water – think dirt, leaves, and even small toys.

Most of the time, the pool can be cleaned by turning off the filter, removing the filter cap located on the pool deck, lifting out the filter basket, and removing any debris before replacing everything. It's best to clean out your filter basket at least once a week.

Once a month you'll also want to clean out the pipes utilised by your filter system, which you can do by backwashing. To do so, simply set your filter to "backwash," remove the leaf basket and clean it out. Then turn on your pump and let it run until the waste pipe ejects clear water.

A final note on turning the filter on and off: Doing so too often can cause the filter's mechanics to crack. Set your filter on a timer and allow it to run for at least six hours a day.

Chemicals costing too much? Give baking soda a try

There's no denying that pool chemicals can be expensive to purchase, so why not get a little help straight from the grocery store?

Most pool stores suggest using sodium bicarbonate to control the alkalinity of a pool without drastically reducing the PH



You want to maintain a water level in your pool that is halfway up the opening of your skimmer

levels. They will try to sell overpriced solutions in order to get the job done.

As it turns out, regular baking soda does the same job as sodium bicarbonate for only a fraction of the price. All baking soda boxes even have “sodium bicarbonate” listed on their ingredients label. Take a look!

If you're worried that using baking soda will mean doing a lot of complicated mathematical conversions, don't be. Baking soda has the same concentration of sodium bicarbonate per pound as the solutions, so the amount you'd need to add to your water would be identical.

Don't be afraid to shock a cloudy pool

On the topic of chemicals, don't be afraid to shock your pool when necessary. While that may seem like a process only fit for public pools. But, think about how your pool water looks after you throw a big party. Odds are it's murkier than it was the day before the big bash. That murkiness? It's bacteria that you'll want to get rid of as soon as possible.

Shocking refers to drastically raising the chlorine levels for a short period of time to kill bacteria. It's done by diluting three to five times the normal amount of chlorine or other chemical sanitizer with water, slowly pouring it into the pool's return line, letting it filter throughout the pool, and then slowly refilling the pool with water over time.

While shocking too often would risk damage to your pool's siding, you should aim to shock the pool at least twice every season.

You need to keep an eye on the water level

As important as the chemical composition of the water is, the physical water level is just as important. The levels will naturally fluctuate after a heavy rainstorm or an afternoon of kids doing cannonballs.

You want to maintain a level that is halfway up the opening of your skimmer. If the water is too low, simply use a garden hose to add the necessary amount of water back in. If the water level is too high, rent a submersible pump from a home improvement store to drain the excess. However, if you're pool's liner is a vinyl or fiberglass material that could be easily damaged by the weight of the pump, consider consulting a professional.

When you've reached the appropriate water level, remember to recheck the chemicals. The water level fluctuations will have thrown them off balance.

Use a tennis ball to absorb oils

Most of the time when people think about tennis balls in a pool, they think about playing catch. However, those toys can do double duty.

When swimmers exit the pool, certain oils can get left behind in the water – suntan lotion, hair product, the natural oils produced by our skin. While it's unpleasant to think about, luckily there's an easy solution.

Simply throw a tennis ball into the water. The fibres used to make the tennis ball will help absorb the oils and keep them from leaving a slick sheen on top of the water.

Schedule a yearly service appointment – whether you think you need it or not

Sometimes you need to trust an expert. Especially when it comes to your pool's mechanical equipment – pumps, filters, heating systems – you may not have the proper knowledge for care. At least once a year, have a pool service professional come out to check your devices.

Before your appointment, take a thorough look at your pool as a whole, making sure to use all of your senses. Compile a list of any leaks you see in the piping, holes you notice in the liner, loud sounds coming from the mechanisms, or odd smells coming from the water. Mention them to your serviceperson in order to give him or her an idea of where to start.



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In the event that there is nothing amiss with your pool, the yearly service appointment may seem like a waste of money and it can be tempting to cancel. But remember: Detecting and fixing a small problem now can save you from having to fix a huge crisis later down the road.

Toe the tile line

Residue, dirt, and contaminants form over time and stick along the water line and tile area. Cleaning this area on a weekly basis should reduce the rate at which the pool gets cloudy and dirty since the residue on the tile doesn't get washed into the pool. Weekly cleaning of this area also reduces calcium build-up. It's also a good idea to clean the cement or walkways around the pool area to reduce the transference of dirt and grime into the water.

Keep dogs out

Dogs often love to jump in after their owners and play around in the pool, but chlorine isn't good for canine companions. Not only will the pool irritate Fido's skin, but the pool will get dirtier and hairier faster. Keeping up with dog hair in the filters may become a full-time job in the summer with dogs in the pool. If the family just can't stand to let the dog wait out the fun on the sidelines, the chlorine levels need to be kept below 3.0 PPM for safety.

Maintain the pH Level

Pool water should be tested regularly to make sure it's clean and healthy. The pH scale is a measurement of acidity or alkalinity that runs from 0 to 14. A reading between 7.2 and 7.8 is ideal; this range is safe for swimmers and helps sanitizers work at top efficiency.

You can monitor your pool's pH level with a testing kit. There are many kinds of testing kits available; however, most



Pool water should be tested regularly to make sure it's clean and healthy



Brushing the walls and tiles helps minimise algae build-up and calcium deposits

homeowner versions are either reagent kits or test-strips. Reagent kits aren't too difficult to use. You take a sample of pool water, then add liquids or tablets to it. The water changes colour, indicating its chemical balance. Test-strips work differently. When you submerge them in the pool for a few seconds, dyes they contain cause them to change colour. Next, match up the strip to a colour chart to determine the pool's pH level. Use this information to gauge what kind and how much of the chemicals your pool needs.

Find and repair leaks

Sometimes it's difficult to determine if low water levels are due to evaporation or a leak. You can discover leaks in your pool by conducting a simple bucket test. Fill a plastic bucket three-quarters full of water. On the inside of the bucket, mark the water line. Place the bucket in the pool, then mark the water line on the outside of the container. (If the bucket has a handle, remove it to allow for better stability while floating.) Let it float for two or three days. If the water inside and outside the bucket has gone down the same amount, your pool is losing water due to evaporation. However, if the pool water level has gone down more than the water inside the bucket, your pool has a leak. That's your cue to call a professional to have it patched.

Vacuum the pool and brush walls and tiles

A pool should be vacuumed every week to keep water clear and reduce the amount of chemicals you need to add to it. There are many types of pool vacuums. If you have a manual design, work it back and forth all over the surface of the pool like you would if vacuuming carpet. It's good form to slightly overlap each stroke. Check the filter each time you vacuum, and clean it if necessary.

But vacuuming isn't the only maintenance that should be done once a week. Brushing the walls and tile helps minimise algae build-up and calcium deposits so they don't fester and become larger problems. The material your pool walls are made of dictates what kind of cleaning tools you should use. Select a stiff brush for plaster-lined concrete pools and a softer brush for vinyl or fiberglass walls. For tiles, use a soft brush to prevent scratching or degradation of grout. A pumice stone, putty knife or a half-and-half mixture of water and muriatic acid can also work well.

YOUR HANDY POOL MAINTENANCE SCHEDULE

DAILY POOL MAINTENANCE

Check water level	A glance at the pool is all it takes to determine if the water level is too high or too low. To lower water from too much rain, use the "waste" setting on a multiport valve, start a siphon hose, or use a small submersible pump.
Check pump and filter	A quick glance to the filter pressure gauge will tell you that water is flowing normally through the filter. Lower than normal pressure indicates that something is wrong before the impeller (full baskets, closed valves, low water level). Higher than normal pressure means that something is wrong after the impeller (dirty filter, closed valves). Listen to the pump for any strange or unusual noises, and if you have a clear pump lid, take a peek to see how the water is flowing through the pump.
Check pH & chlorine	Okay, you don't have to do it every day, but you should test it at least 2-3 times per week. Keeping your pH and chlorine level consistent is the best thing you can do. Avoid peaks and valleys of chlorination and don't allow the pH to drift too high, or too low. Maintain a pH of 7.4-7.6, and a chlorine level of 1-2 ppm.
Check pool cleaner	For pressure cleaners that run a daily 2-3 hour cycle, give it a quick look to see if the bag appears full, and empty as needed. For suction cleaners and robotic pool cleaners, you need not run the cleaner daily, unless your pool circulation is very poor. Run a pool cleaner only as much as needed, to save wear and tear, perhaps 1-3 times per week, for as long as it needs to clean the pool, usually 1-3 hours.
Check baskets	Pump baskets usually have a clear lid to see if the basket is full, or if there are flow problems. Clear skimmer lids would be useful, but are not common. If the pool is clean, the skimmer baskets probably are too. Empty skimmer baskets as needed to keep skimmer suction strong and effective, and be sure the skimmer weir is in place.

WEEKLY POOL MAINTENANCE

Clean pool	Skim the surface, vacuum the pool, and brush the pool walls and floor. If you have a suction or robotic pool cleaner, you can set it up weekly to vacuum the pool floor, but you may still need to do some regular skimming. Brushing the pool walls and floors is a great way to improve circulation and prevent algae formation.
Check total alkalinity	A weekly check of your total alkalinity levels is a good way to keep your pH level consistent. If your TA is too high, it makes pH adjustment difficult, and if TA is too low, pH is hard to control. Add an acid to lower TA and add sodium bicarb to increase TA to a range of 80-120 ppm.
Add specialty chemicals	A weekly dosage of algaecide, clarifier, enzyme or metal sequestrant can be added weekly to help improve filtration, control algae or prevent metal staining. Pool water balance and control of algae requires a good stock of various pool chemicals.

MONTHLY POOL MAINTENANCE

Clean pool filter	Usually it's monthly, but it's not really how long the filter has been operating; the indicator of when to backwash is your filter pressure gauge. When the gauge is 5-10 psi higher than normal (or when flow rate is noticeably reduced) the filter should be backwashed, or removed and cleaned if you have a cartridge filter.
Shock the pool	Also not necessarily a monthly task, but many pool owners make it a monthly habit to raise the chlorine level to 5 or 10 ppm, to kill any bacteria or algae that may be lurking. Another reason to shock is to break apart combined chlorine, as tested by a DPD test kit. When combined chlorine levels exceed 0.3 ppm, it's recommended to shock to a level 10x greater than the tested CC level.

ANNUAL POOL MAINTENANCE

Tune-up pool cleaner	Pool cleaners have a lot of parts in contact with the pool, and other wearable parts too. Inspect closely for parts that need replacement, and order some pool cleaner parts.
Clean filter thoroughly	Filters need to be removed and thoroughly hosed clean at least once per year. After hosing clean, soak in a pool filter cleaner made specifically for your filters. Cartridge filters can also benefit from an annual chemical bath, to dissolve minerals and oils soaked into the fabric. Sand filters also develop layers of oily deposits in the top few inches of sand, which can be dissolved by using a sand filter cleaner annually.



Expand a small room into being exceptional with an airy and welcoming feel.

How to make a small room look BIGGER

Choose furniture carefully if you have a small room

Too often a small room in a home becomes a 'dump and leave zone', the door is closed and it becomes a forgotten space, wasted. With a few clever tricks, the same room can become a warm feature in your home, to be enjoyed regularly. Colour choices can make a room appear very different, especially when it comes to paint. This one choice can make a small room airy, yet cosy; and an intimate and beautiful place all in one smart move. Unified colours used throughout the extra touches and furnishings also visually expands a room.

The use of natural light or artificial lighting can make dramatic change in

bringing about the sensation of being in a larger area.

Along with a lot of other practical ideas, you are on your way to redeeming the small room.

Colour creativity

For this project stay away from darker colours that tend to draw the walls inward, shrinking the perceived space. In order to take the best advantage of natural light in your room, choose light colours. Stark, brilliant white is a bit harsh, so choose off white colours for a more inviting look. Neutrals, pastels and gently tinted whites expand the feel of a space, giving the illusion of more

space. If you room is long and narrow, paint only the end wall with a darker colour to 'widen' the room by bringing that wall 'closer'. Dashes of colour can be brought into the room by way of an interesting chair, a painting, a rug, or one or two scatter cushions.

Paint a stripey illusion

For a stylish touch use neutral coloured stripes that are equal in width measurement, or for a touch of character, use different width measurements

Vertical stripes make a roof feel higher; and horizontal stripes make a wall appear longer.

>> Kim Roberts



Room trimmings

By keeping the same colour for all the room trimmings – cornices and skirting boards, it will give the room an appearance of more height, therefore a more spacious feel. If you prefer a different colour, simply use a slightly darker shade than the wall shade.

Furniture

Fool the eye by using glass or see-through furniture. Utilise your space wisely by using multi-purpose furniture or hidden storage pieces. Choose a fold away table, or furniture with exposed legs; or add wheels to make the furniture easy to move out of the way if necessary. If a bookcase is used, rather a ceiling-to-floor or a wall-to-wall one which will extend your space. Do not fill all the shelves, again, adding to space to the area. A long fit to wall counter is also a useful trick.

A single statement piece of furniture, the same colour shade as the walls, blends

in, creating space, rather than crowding out. Take care of the placement of this piece, against a wall is not always best. Place the piece with open spaces around it, or at an angle, creating that roomy feel.

Finishing touches

Hang floor-to-ceiling curtains matching the paint colour or use sheer curtains. Go for neutral or plain colours, or small print fabrics in this room; even down to the rugs. You can use small lamps to bring light to dark corners, or use a good eye-catching ceiling light fitting.

Keep the décor in this room to a bare minimum and declutter. One large art piece displayed on the wall is an elegant touch.

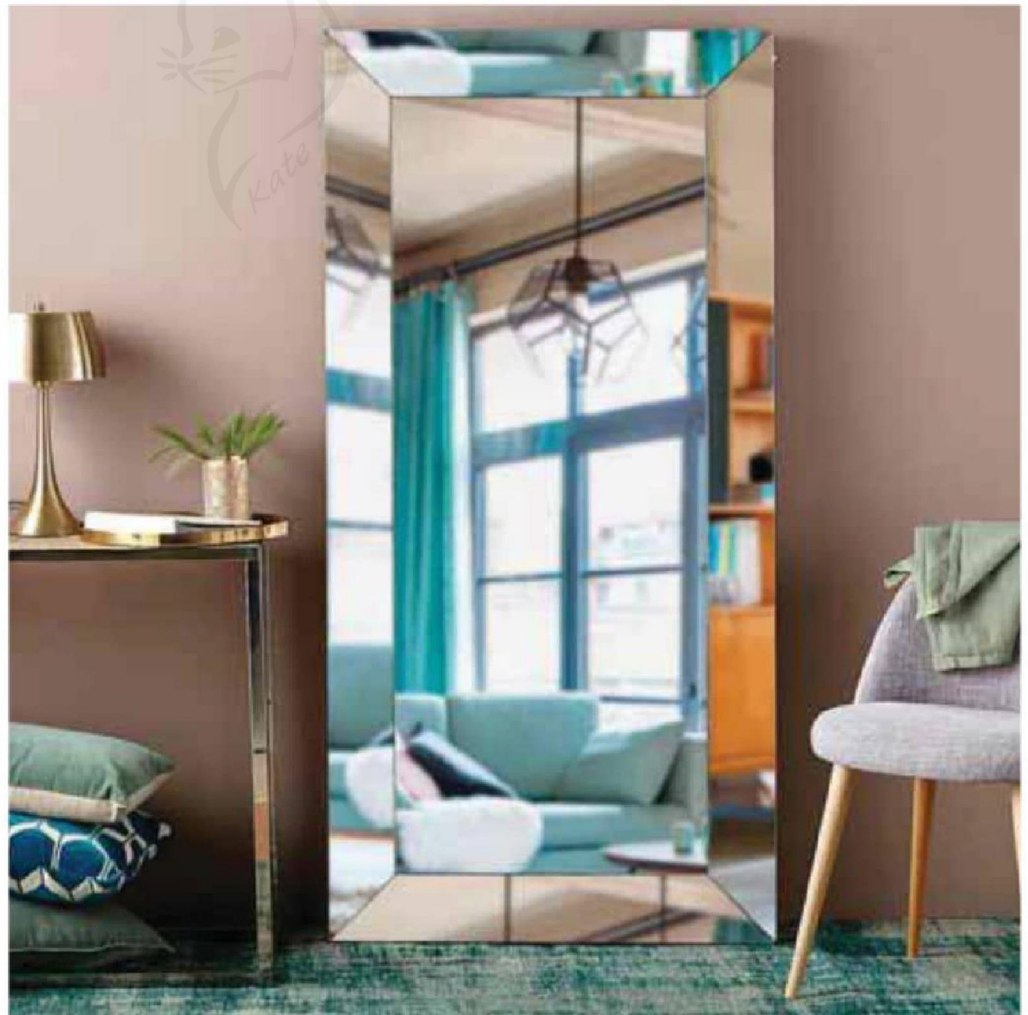
There is nothing more satisfying than creating a completely welcoming zone in your home. With these tips you will be able to make that small zone a very good zone.

Mirror, mirror on the wall

Mirrors reflect both artificial and natural light and so extend extra depth to any area they are in. Opposite a window they effectively reflect the outdoor area, opening the room up. Mirrors can be mounted on walls or be set in the doors of any cupboards in the room.

Ceilings

Traditionally, ceilings are white, but by choosing to continue with the exact light wall colour used on the walls onto the ceilings, more height is experienced in that room.



Strategically placed mirrors can make a small room look bigger

SIMPLE PINE SIDE TABLE

This project for a side table is based on a Shaker design used commonly with both large and small tables.



NOTE: A profile jig sheet in A3 format for the legs is available from the publisher. Request a download of PINE TABLE LEG PROFILE by emailing editorial@homehandyman.co.za

The design we're going to use is made of one-piece laminated pine shelving 1000 x 457 x 20mm – standard or cut from 1800 x 457 x 20mm, plus one piece 1800 x 220 x 20mm. The table is made up of parts A through E. Start by making the feet (A) and (B) legs. Try and select pine with not too many knots in it, since these parts support the table. You can scale

up or down with the size to suit your needs.

Rather than show you photos of the various stages of cutting and trimming, a six-step guide is described which, using simple power and hand tools, will enable you to construct the table. For example, it is best to cut the leg and feet parts to final shape after they are assembled.

Step-by-step guide

Step 1: Cut four pieces of 20mm pine shelving to 130 x 280mm. These will become the item 'A'.

Step 2: Mark-out the pieces as shown in Fig. 2. Remember to measure twice before cutting. Accuracy is important here so, before starting to cut to shape, check that the angles noted are close to those given. The design of the table is to 'squeeze' as much as possible out of standard Pine PAR.

Step 3: This step involves clamping a foot piece into a wood vise and marking out carefully the slot which needs to be cut. Use a tenon or backsaw to cut a slot 28mm deep; you can use a steel rule to check depth. Keep inside the lines marked on the edge of the wood. Use a 12mm well-sharpened chisel to remove material and clean out the slot. As a 'test' jig you can use two pieces of 6mm MDF glued together to see if the slot is evenly cut and the test piece of 1mm is a snug fit. Do this on all four-foot pieces.

Step 4: Here we start preparing the legs 'B'. Make two pieces as shown in Fig.3. The work to be done here is to cut the tenon and the slot in the middle of the leg. Again, take care in measuring and marking out. The centre slot can be initially drilled out using a 12mm Forstner or flat drill bit. This is where we join the feet pieces to the leg piece, (Fig. 4.).

Dry fit the leg piece to two foot pieces. Mark out and cut right angle slots in the leg pieces 25 x 25mm. The right-angle slots will accommodate a pair of clamps. Glue-up the leg tenon ensuring an even coating of glue on the tenon. Place and tighten clamps. Leave overnight to harden.

>> Geoff Hollingdale

Originally, I was going to join the legs to the cleat 'D' with a tenon joint, and you can work with this option. I decided to use 8mm dowelling to secure the leg (B) to the cleat (D). A long piece of stiff card bent slightly will assist in marking out and creating the curve on the leg. This curve at the centre point is 60mm. Use small panel pins to position the card to draw the line of the curve using a pencil. We'll leave the shaping of the leg until we've got the feet attached.

Create a paper stencil for the foot shape using a layout like Fig.6. Make a mirror image copy for the right leg. Tape the left and right sides together. Use stencil glue to paste the paper stencil on the foot assembly.

When you've marked-up both leg and feet pieces use a jigsaw to cut to the stencil line. Fig. 7. Keep the cut line outside the stencil line. Use a wood rasp to shape the legs and feet to the desired profile. Sand the assembly with an orbital sander fitted with 120 grit sanding paper. 'Break' all edges to slightly round them. I like to use the hand size finishing sanders like, e.g. the Maktec or Ryobi which both allow you to use economically, a quarter piece of a standard sanding sheet.

Step 5: Now we start to create parts C and D, the cross brace and the top support. Again, to create the line for the curve use a strip of stiff card positioned with panel pins to draw the curve.

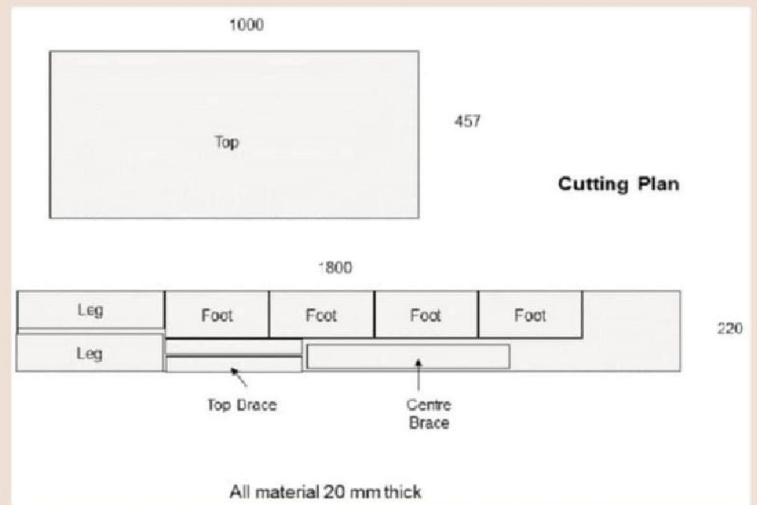
Carefully mark out the two tenons using a single pin marking gauge. This is one of the tools you should have in your basic set of woodworking tools. Carefully cut to the outside lines of the tenons. Use a 12mm chisel to trim to dry fit tightly in the leg pieces. Take some time doing this step to get an aligned joint square to each leg. You don't want a result where the table rocks from side to side because of poor alignment between the legs and the cross brace. If necessary, trim out the tenon to get the assembly to stand upright without skew between each side.

Finally, cut a sawblade thin slot in each tenon to take the thin wedge used in final glue-up.

Use a jig saw to cut the curve. Keep the blade outside the marked line. Use a wood rasp and an orbital sander with 120 grit paper to give a smooth shape to the piece. 'Break' all edges with the sandpaper.

The top support is shown in Fig. 9. The profile can be cut using a tenon or back saw. Use a wood rasp to create the rounded ends. The suggested end rounding is 16mm but you can draw a curve around a pill bottle to create the shape.

For the dowelling I used a dowelling jig made by Milescraft, the Joint Crafter kit which allows 6, 8 and 10mm doweling to be accurately positioned on mating pieces of wood. I used the 8mm doweling drilling holes in the top of the legs



Cutting diagram

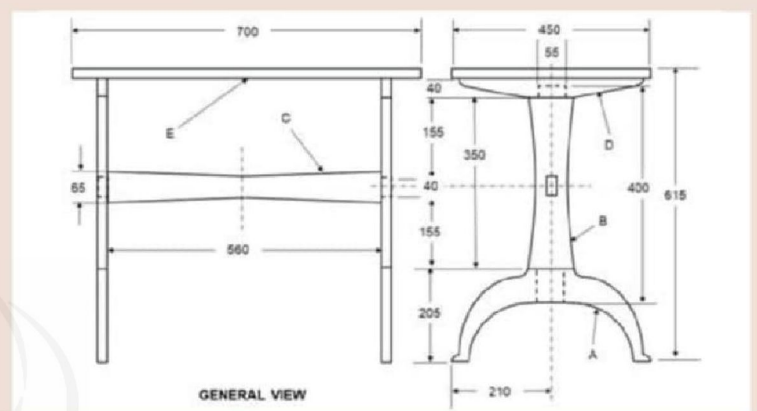


Fig. 1

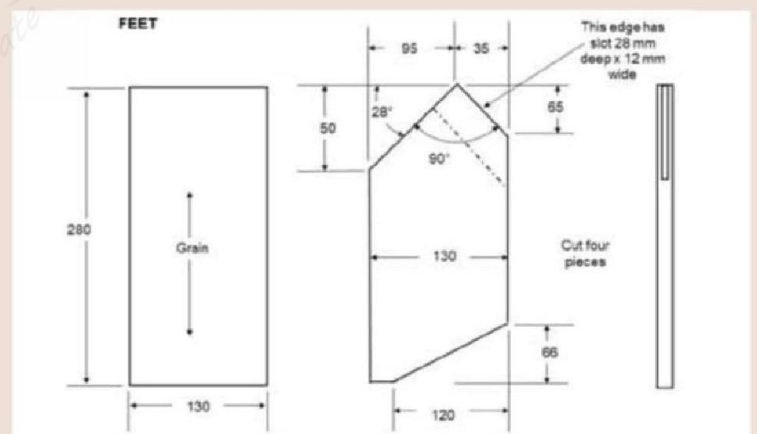


Fig. 2

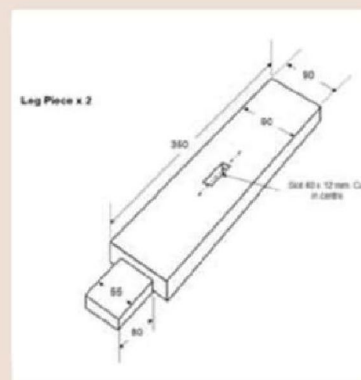


Fig. 3

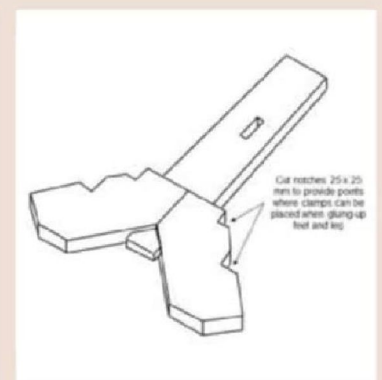


Fig. 4

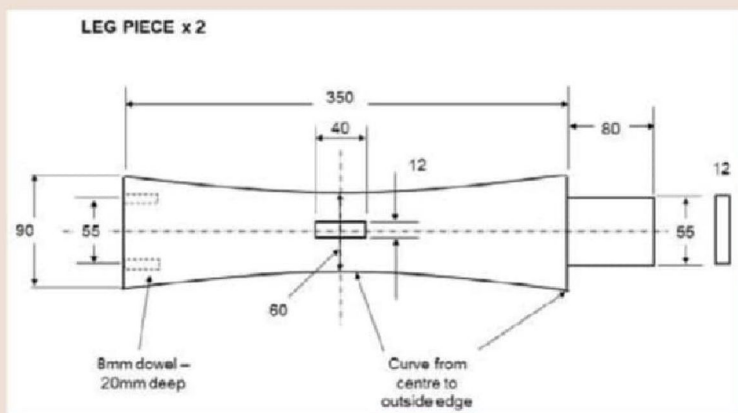


Fig. 5

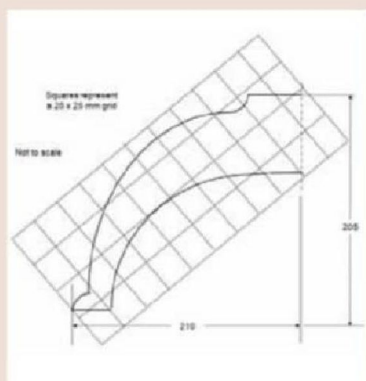


Fig. 6

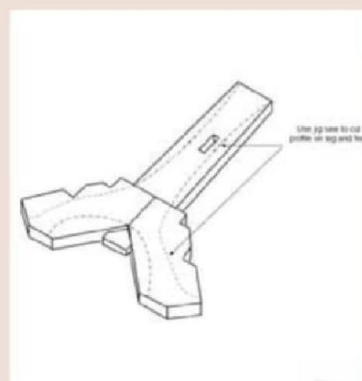


Fig. 7

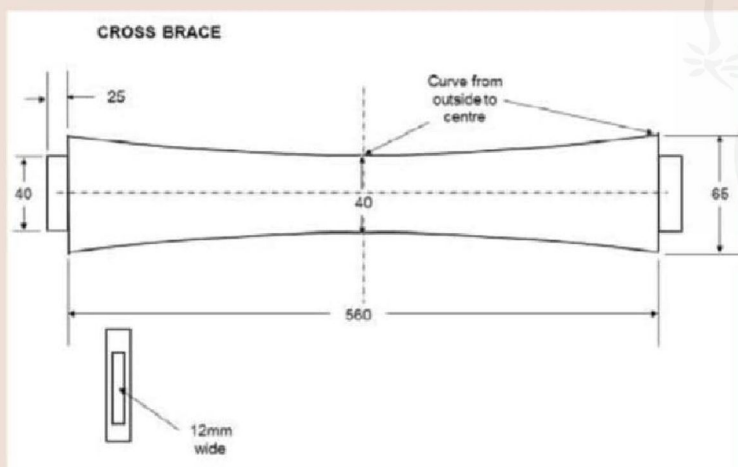


Fig. 8

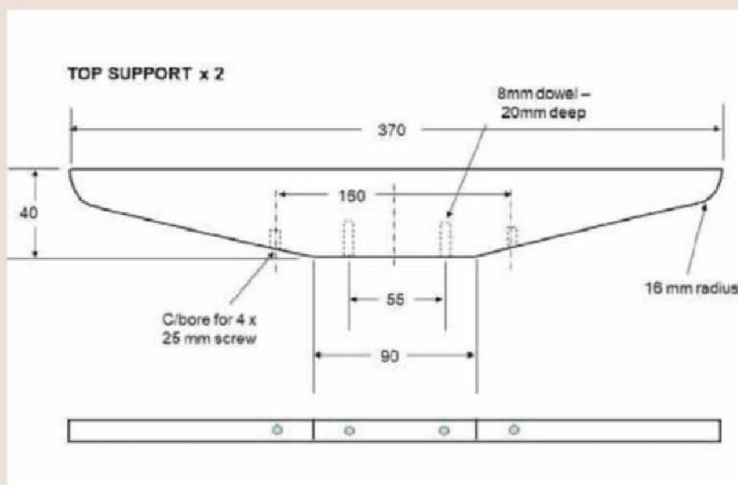


Fig. 9

which we discussed in Step 4 to mate with the holes in the two support pieces.

The holes drilled for the top fixing screws were 4 x 40mm. I over-bored the holes to 5mm to allow for shrinkage and movement of the top.

Step 6: Now we can cut and shape the top. Piece E. The shape to which you will cut the top is a compound set of curves. From the pine shelving 1000 x 457 x 20mm start by cutting the length of the board to about 750mm.

Mark out using panel pins and stiff card strips the curves on the top. I marked - off several points at 35mm from the edge to use as the curve termination edge points from the centre line. See Fig. 10.

Carefully trim the edges using the jigsaw outside the marked lines to get the general shape. Use a wood rasp to shape the top to the curves. A worthwhile hand tool to have for this sort of work is a spokeshave. These are available at hardware shops ranging in a wide variety of prices.

Sand the edges with a rounding action to create an edge without hard edges; it should feel gently rounded. Pick which side looks better, i.e. less knots and breaks. Sand the side you've chosen to a fine finish. A 220 grit paper is more than enough.

Check all the parts have been sanded to a fine finish. It's now time for assembly. Start by gluing the tenons on the cross brace to the legs. Prepare some thin wedges from any hardwood offcuts you have for use in pining the tenons. Lightly glue the tenons, don't over glue. Wipe-off any surplus glue as the tenons fit into the legs. Stand the table on its feet and check that its feet are aligned on either side. The legs should not be "skewed" to each other; the assembly needs to sit firmly on its legs.

Drive the thin wedges into the tenons to lock them in place. Set the assembly aside to allow the glue to set.

The next step is to have ready the 8mm dowelling cut to size and ready for assembling the top support to the legs. Use the 8mm dowelling that is sold with the 'rifling' already cut into the dowel. Lightly spot glue onto the dowel and gently tap it into the top support pieces. Take each top support and lightly spread glue across the joining surface and the dowels and set into each leg. Use a scrap piece of wood and a mallet to ensure the top support is firmly on and square to the leg assembly.

Set aside for the glue to dry. Chisel and sand the protruding leg tenons flat to the surface. You can leave it like that or make small shaped pieces which can be positioned and glued over the tenons as I did on the version shown in this article.

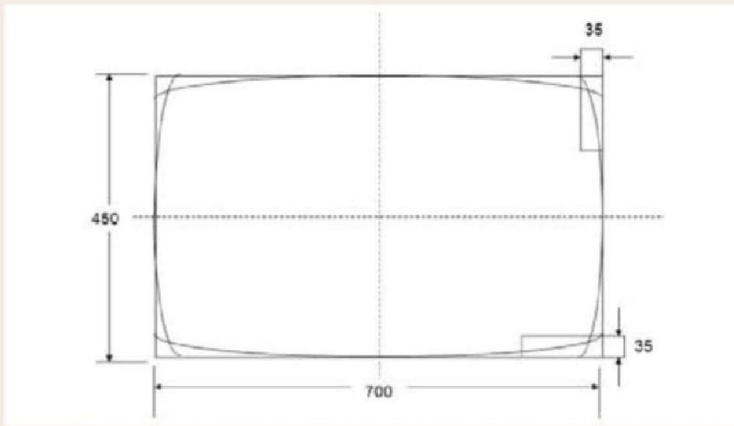


Fig. 10

The final step is to prepare the finish on the table before assembling the legs to the top.

In the version I made, I used Woodoc Gel Stain. It's an easy-to-use concentrated stain for wood. It spreads easily

and evenly when applied. Gel Stain is available in a range of colours in wood and decorative tints.

The advantage of the gels stain is that it does not run on the surface and gives clean lines with masked areas. This makes it both easier (and less messy) to work with and gives better results when masking areas. It is also easy to control the intensity of the colour by applying multiple coats (each coat is dry enough for another coat in about one minute).



Fig. 11

Assemble the top to the legs. Re-check that the table sits firmly on its leg without rocking. If there is a slight misalignment you can use a drawing pin tapped into a leg to correct the table stability. Finish the assembled table with Woodoc 5 Sealer. Two coats will be sufficient. Lightly rub down the surface between coats.

A note about this table

The Shakers themselves, in the 1823 'Summary View of the Millennial Church' wrote that, "True gospel simplicity [is reflected in] thoughts, words and works [that] are plain and simple." Despite such strong links to simplicity, however, the Shaker people themselves offer a study in contrasts.

Long believed to have died out, they're still functioning in the form of many centres across America which for enrichment of our arts and cultural values are vital in preservation. And, perhaps most important for woodworkers, the style of furniture and design they created through their desire to separate themselves from worldly influences has permeated international and American culture.

The Shaker population reached its peak in the mid-19th century, with an estimated 4 000 to 5 000 Shakers. More than 300 Shakers lived at Hancock, a key centre in Hancock, Mass. during the height of the community there.

The Shakers are one of the most intriguing social and religious movements in American history. They are also one of the longest lived and are considered by many to be the most successful of the hundreds of communal groups and utopian societies in this country since before the Revolutionary War.

As the Shakers grew in influence and numbers in the 19th century, they challenged the existing social and religious structure and economic order of the new nation and eventually developing an alternative lifestyle based on their religious beliefs. The Shakers have made important contributions to American and international culture in the areas of art and design, science, architecture, craftsmanship, business, music, education, government, medicine, agriculture, and commerce.

The design used in the article originates from a Shaker community in the Harvard community based at Fruitlands, Mass. The delicately carved shapes of the legs and arched feet were joined with mortise and tenon. Often, the tables, as can be seen on this example made in 1840, contained an underslung drawer.

Although pine was the most frequently used for the tops, a variety of other woods, including ash, oak, maple, cherry, and walnut were used for other parts of the construction.

Among tables of Shaker design, the assortment seems almost limitless. However, there were only two types of legs: some were square and tapered, others were made plain and turned. Tables came in a variety of shapes and sizes ranging from little beside stands to huge trestle tables capable of seating 6-8 people.

Following their practice of eliminating all excess weight, the tables were precisely proportioned with all parts shaved down to a minimum thickness.

An excellent reference to Shaker design is: "Making Authentic Shaker Furniture", John G Shea; ISBN0-486-27003-3. The example shown and design of the table in the article can be found on pgs. 156/157. The feature added in the project version is a cross-bar assembly. This can be left out and an underslung drawer constructed which provides sufficient stability.



Photo courtesy Fruitlands Museums:
The Trustees of Reservations, Harvard, Mass



QUICK PLUMBING REPAIRS

From leaky taps to clogged drains, every home faces some fundamental plumbing issues over time, irrespective of how much was invested in developing the house.

A leaking tap is relatively easy to fix. In most cases, all it needs is a replacement of the O-ring to make the joint watertight again

Generally, the older a house is, the more frequent your plumbing problems will be. Regardless of how and why the problems occur, what exactly are you, the homeowner, supposed to do when your toilet will not stop running or when that dripping tap in the sink continues to waste precious water? This is when many people consider DIY plumbing repairs as the best alternative. Wondering why?

A professional plumber can help you deal with your immediate plumbing woes with ease. However, what if the plumber is not picking up your calls or is busy and cannot

arrive immediately? This is when you need to think about whether there is an alternative to hiring a plumber.

Guess what? If you are handy with a few tools lying around your house, you can take on some easy DIY plumbing repairs, saving not just money, but also the hassle and waiting time associated with hiring a plumber for the same task.

Wondering how to go the DIY route and which plumbing repairs you can tackle on your own? Keep reading to find out...

THE TOOLS YOU'LL NEED

Not having the right tools at hand is one of the many mistakes that can ruin any DIY project. To avoid falling prey to this scenario, here are some of the tools that must be included in your toolkit at home for immediate DIY plumbing repairs at any time:

Screwdrivers

Plumbing fixtures often need to be disconnected and loosened so they can be adequately fixed. For this, you might need both a flathead as well as a Phillips screwdriver. The flathead works for screws that have a minus sign on their head, while the Phillips screwdriver fits perfectly on screws having a plus sign at the top.

Adjustable wrench

While most people who own a car have a basic wrench for nuts and bolts at home, plumbing repairs require a very particular wrench. A pipe wrench or an adjustable wrench is ideal for tightening pipe joints because it opens up wider than a standard wrench and can be adjusted to fit a wide variety of widths.

Combination pliers

While not compulsory, especially since you have an adjustable wrench at hand, having combination pliers can be helpful not just for plumbing repairs but for other tasks as well. Lineman pliers or combination pliers generally have a thick head with serrated edges for better grip and smooth edges for cutting wires. Its multipurpose use makes it a must for every household.



For slightly blocked drains, baking soda or specialised drain cleaner can be used

THE TOOLS YOU'LL NEED *contd.*

Drain snake

A drain snake is like a thick piece of bent wire with a curved edge. This tool is ideal for removing clogs from your drains, especially if the blockage was caused by soap residue or hair stuck in the pipe.

Plunger

This universal tool for plumbing is already present in almost every home. A plunger is required to get rid of small clogs. It is also ideal for clearing up the drain of your toilet, bathtub, or sink.

O-rings

An O-ring is also known as a washer and is a thin disk with a hole in the middle. This is used as a fastener in a variety of settings and is available in metal, plastic and rubber alternatives. The one used most commonly in plumbing though, is a rubber O-ring, which secures a joint and prevents water leakage. These rings are also available in a range of sizes, and you need to know which ones are used in your home's plumbing system before purchasing them.

Fixing a leaky tap

Problem: Tap fittings loosen with time and need to be fixed. This can be said for all taps, whether they are located in your bathroom or your kitchen. The first sign of a leaking tap is that it starts to drip even after it has been turned off. Whether the drip is constant or in the form of drops falling from the spout every few seconds, the problem needs to be fixed.

Solution: A leaking tap or faucet is relatively easy to fix. In most cases, all it needs is a replacement of the O-ring to make the joint watertight again. However, you will need to pry off the decorative cap placed on it before being able to access the actual screw that holds the tap in place. Once you unscrew the faucet, you can just take out the old washer, replace it with a new one and put the whole thing together again.

Installing a new tap

Problem: If the leak is persistent and the above solution did not work for you, you should consider replacing the tap entirely to avoid wastage of water.

Solution: The process of replacing a tap is pretty similar to repairing a leaking one, but first, buy a replacement that is an exact match to your current tap. If you know what kind of faucets are fitted in your home, then buying a new one is easy. Otherwise, you need to take off the decorative cap and unscrew the tap. Collect all of its parts and take them with you to the local hardware store.

The shopkeeper should be able to tell you which kind of tap would work best as a replacement, even if an exact match is not available. While dismantling the faucet, be sure to note what part goes where so you can simply assemble it back once you have a new tap in hand.

Turning off the water supply

Now that you have the tools in hand, you might want to begin the repair work immediately, but wait, have you turned off the water supply in your home before attempting DIY plumbing repairs? While many small plumbing problems might not require you to turn off the water supply completely, it is always safer to do so, especially with DIY repairs. You do not want to end up with a flooded bathroom as a result of a repair job gone wrong.

To turn off the water supply, look for the main water valve in your house or flat. Once you find it, turn it off and then follow the tips given below to tackle a variety of plumbing repairs on your own. For smaller jobs like a leaking tap or toilet, both the fixtures come with a water access valve located underneath them, which can be turned off before performing a repair.



Leaking shower heads can generally be repaired with minimal tools



If you have running water in your toilet, you first need to determine the cause



Unclogging a drain

Problem: A poor sewerage system in your area can result in water coming back up the drain. Alternatively, hair, soap residue, and other solid waste can collect in your drainage pipe over time, resulting in a blockage. The blocked drain could be of a sink, a tub or a toilet and here's how to unclog every type.

Solution: If you have a slow draining sink, you can remove any possible clogs by putting a drain snake down the drain. If you have soap or oily residue (in the case of kitchen sinks) that has collected on the walls of your drain pipe, the drain snake should be able to loosen it enough for it to pass through the pipe into the gutter.

In case of a blocked bathtub or shower drain, the biggest culprit is generally strands of hair collected within the pipe like a ball and not allowing water to pass through. A drain snake can usually get rid of the clog for you. However, remember to pull the clog towards you, not the other way around. You do not want this hairball to end up as a clog further down the pipe where you cannot pull it out.

A clogged toilet is another type of drain blockage that most homes face. A rubber plunger is all you need to get the drain fixed and flowing again.

Fixing running water in a toilet

Problem: Is your toilet's flush continuously wasting water? Want to put a stop to it? While you could always close the valve that supplies water to the flush until you need to use it every time, this is not a permanent solution. A running flush can be because of a worn stopper or flapper, a faulty fill tube or an improperly adjusted float.

If you have running water in your toilet, you first need to determine the cause. Open up your flush and press down or pull up on your flush, based on its mechanism.

Generally, when you flush, a flapper or stopper is removed from its spot, causing the water in the overflow tube to rush into the toilet bowl. Once the water is drained, the stopper takes its place once again. The fill tube then sends more water to the overflow tube, keeping it filled and ready for the next flush.

Meanwhile, a floating object, usually a ball or a cup, rises along with the water to a certain height below the mouth of the overflow tube, ensuring that there is no overflow, and thus, no running water. The float's height is maintained with the help of an adjustment mechanism, which does not allow the water to rise higher than the overflow tube.

Solution: Keeping the working of your toilet in mind, check if the stopper or flapper is returning back to its original position and offering a snug fit. If it is worn or loosely fitted, you can try adjusting it. However, adjustments might only work temporarily. For a replacement, buy the same flapper for your flush as the one currently installed and note how it is connected to the chain that pulls it up. Next, just take the old stopper off and replace it with a new one.

Another aspect to check is whether the fill tube is adjusted correctly to send water into the overflow tube. If it is not placed correctly or if it is underwater, it will not send water to the flush as per its purpose. The fill tube should connect to the fill valve for water supply on one end, but its other end should be right over the opening of the overflow tube to fill it up. The tube's mouth should remain above water at all times to send water with pressure into the overflow tube. If the fill tube is clogged or missing, just purchase a new one and fit it into the fill valve to hang over the overflow tube.

The last possible cause of a running toilet might be that the float's level is set too high, due to which, water is filling up, over and around the overflow tube. If the overflow tube constantly has water above its own height, it will continuously drain water into the bowl in an attempt to maintain the right water level. Ideally, the float should stop about 4-5cm below the opening of the overflow tube. The float's adjustment is made based on its type. For a ball float, the arm connecting the float will have a screw that allows it to move up or down. For a cup float that is located around the fill valve, the fill valve usually has a rod to help the float move up or down.

Be sure to check the flush after each DIY repair to ensure that the problem has been eradicated.

TOP TIP!

Temporary plumbing seal
Den Braven All Round Sealant is a good versatile, elastic sealant to keep in the home. Its most unique feature is that it can be applied to moist or damp surfaces, making it ideal for the temporary sealing of a minor plumbing leak.

Fixing a leaking shower arm

Problem: If you have a shower leaking from the shower arm, you might need just a simple fix or a somewhat major repair, depending on where the leak is and your plumbing setup. To confirm the terminology, a shower arm is the short length of the pipe that comes out of the wall and connects to the showerhead. Shower arms typically have a slight bend near their middle, and they almost always have threads on both ends. One end threads into a fitting called a drop-ear elbow inside the wall; the other end receives the showerhead, which simply turns onto the exposed end of the arm. The first step in dealing with a shower leaking from a shower arm is to determine exactly where the leak is coming from.

A shower arm can break in the wall or cause the vertical pipe in the wall to break if too much pressure is applied while unscrewing the showerhead or shower arm. Damaging the shower arm while the showerhead is being replaced is a surprisingly common occurrence. The shower arm may also become damaged simply by the repeated pressure of adjusting the showerhead over years of use. Sometimes it is the threaded end attached to the showerhead that gets damaged, but more problematic is when pressure on the shower arm causes damage to the connection inside the wall. It's also possible that either of the threaded joints simply isn't sealing properly.

Solution: If your shower leaking seems to be coming from the base of the showerhead, look for a crack in the showerhead and the shower arm. Many showerheads look like metal but are actually plastic with a chrome finish. Plastic cracks a lot more easily than metal (but metal can crack, too). If there are no visible cracks, try the following fixes:

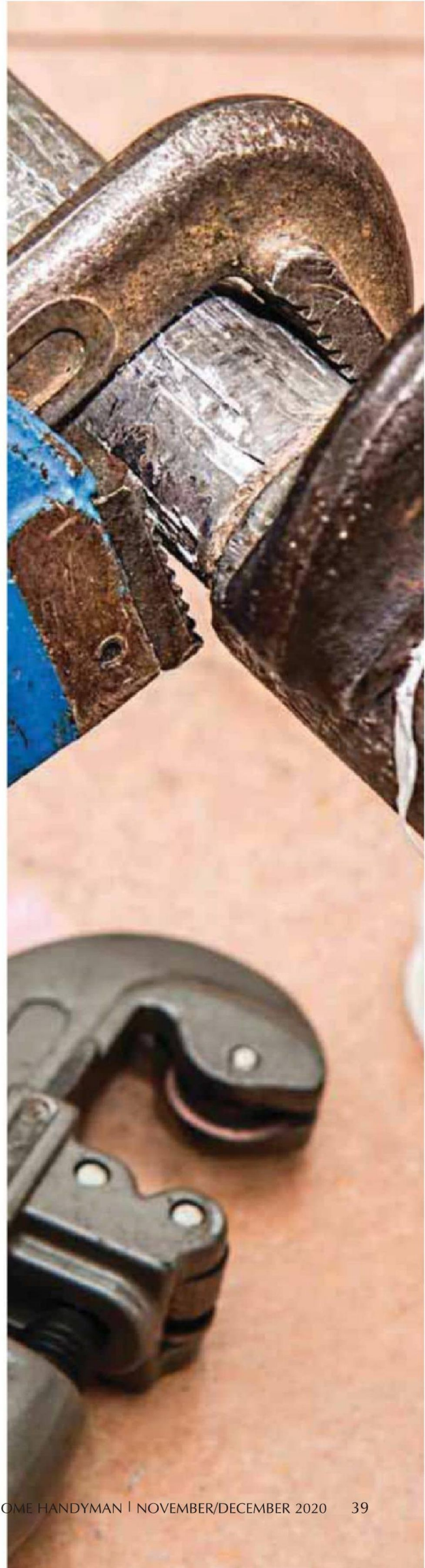
Unscrew the showerhead. If necessary, hold the shower arm with pliers to keep it from turning. Tip: Wrap the pliers' jaws with masking tape to prevent scratching the shower arm.

Clean the threads of the shower arm, removing any old plumber's tape, pipe-joint compound, and mineral deposits. Wrap plumber's tape around the threads of the shower arm, wrapping in the same direction that the showerhead will twist back on. Reinstall the showerhead, tightening it until it is very snug. You shouldn't need to tighten the showerhead with pliers, but if tightening is difficult, hold the shower arm with one pair of pliers and tighten the showerhead with another pair.

Test the connection for leaks. If it still leaks, tighten the showerhead a bit more. If that doesn't stop the leak, replace the shower arm.

If reinstalling or replacing the arm doesn't stop your shower leak, you may have a problem with the drop-ear elbow or with the vertical shower pipe. There are several different ways to fix this, but all require gaining access to the shower plumbing. If someone installed an access panel on the other side of the shower wall, you're in luck; if not, you'll probably have to cut a hole in the backside of the wall to access the plumbing.

Once the plumbing is visible, you can see where the leaking occurs and what type of piping you have. If it's galvanized pipe, the drop-ear elbow is probably threaded onto the end of the vertical pipe and you can simply twist off the old one and twist on a new one. If the piping is copper, all of the joints are probably soldered. This means you'll have a decision to make. Soldered copper is still the gold standard of plumbing connections; if you want the same quality, hire a plumber for the repair. He or she might be able to cut the vertical pipe and add a new section, along with a new drop-ear elbow, using a soldered coupling. You might decide that it's a good time to replace the entire shower faucet.



Manmade boards differ from solid wood boards in that they are made from renewable sources of trees and reconstituted into boards. Strip-laminated boards, sometimes called laminated shelving, are also made from renewable wooden sources such as pine and saligna, must still be considered as solid wood.

Working with manmade boards

Some melamine faced designs

Many DIY'ers and hobbyists do not make much use of manmade boards, possibly due to a feeling that it is not real wood and does not work like real wood. Some may even feel that furniture made of this is inferior. Of course, this is an incorrect assumption. An anecdote to contradict this assumption is the case of an odd 40-year-old dining room set that belonged to a family member. During conversation, that I cannot recall now, I mentioned that the table and sideboard was primarily made of veneer board. The person was very astonished because the furniture was still in excellent condition, and he could hardly believe my observation (I still think he did not believe me). But the tell-tale indications could be seen by the knowledgeable eye.

Many upmarket office and home furniture are manufactured utilising some form of manmade board. Before going under, the company Gordon

Frazer made the most beautiful furniture using their almost iconic yew veneer on chip board substrates, combined with solid wood. The renowned company Hartmann and Kepler also make ample use of manmade boards for their expensive and exclusive furniture.

Some of us may still remember a product called 'block board'. It was prevalent in the nineteen sixties and seventies. The boards were made up of laminated pine strips, covered both sides with plywood sheets. Albeit a manmade material, it was not a success, and it disappeared from the market. As a schoolboy in the fifties a product named 'Hardboard' was available. It also was manmade board. I remember in those days my brother and I built a small rowing boat utilising 'tempered Masonite.'

In South Africa there are a number of different manmade boards available for woodworking and other purposes. As far

>> Willie Marneweck

I know it consists of chip board (called particle board by the manufacturers), medium density fibre board (MDF), various plywood boards, and masonite. A product called OSB (Oriented Strand Board) can be ignored for the purpose of woodworking and so also laminated bamboo.

With emphasis on its usefulness for cabinetry and furniture the different generic names are looked at in turn.

Chip board (CB)

Chip board is made from finely graded wooden chips bonded by resin and adhesives under pressure and heat. Looking closely at a crosscut piece of board one will see that the particles are coarser towards the centre, with finer graded particles towards the surfaces. The reason for the fine grading at the faces is most probably to give less porous and smoother faces. After manufacture



Samples of wood chipboards

both faces are sanded all over to 150 grit sandpaper giving smooth surfaces. According to Sonae (manufacturer) specification, after sanding the overall thickness over an entire board of 1,8m x 2,7m may not anywhere vary by more than 0.3mm. This tolerance is important because some boards will be covered with veneer, itself being only some 0.7mm thick. After pressing a veneer lay-on each side the boards are again sanded both sides.

The manufacturer PG Bison indicate a mass of 53kg per board of 16mm thick, sized 1820 x 2750mm. This relates to 660kg/m³, comparable to many solid woods.

I believe that our locally manufactured chipboards are of a remarkably high quality. The surfaces of A-grade chip board are very smooth and even slightly shiny. Raw boards can be utilised in many applications, but not where

appearance is of importance. For this reason, CB is most often supplied with face covering. The covering is either melamine or veneer. Boards are always covered both sides to obtain stability. Boards are mostly sold in 1,82 x 2,75m sizes. Raw CB is manufactured in thicknesses 6, 12, 16, 18, 22 and 30mm. While 16mm is the most popular and cheapest, other thicknesses may have to be specially ordered.

Melamine covered CB

CB covered with melamine is without doubt the most widely used board material in South Africa. It is the work horse of the kitchen cupboard and built-in-cupboard industry. Low end office furniture, for example, are made extensively utilising this kind of board. The benefits are that the boards are ready to use, looks like real wood, and the faces are extremely durable. Inside cupboards one will usually see white melamine. This lightens up a cupboard inside and looks clean. Melamine boards are available in a variety of mono colours as well as designs imitating real woods to a high degree of authenticity. Board suppliers will readily show samples of all the available melamines. Board manufacturers have proprietary names for their melamine covered boards. Boards are always covered with similar melamines on both sides.

It is not deemed necessary to elaborate on how melamine is made or applied to boards. The main thing to remember is that it is very durable and requires no finish.

Veneer covered CB

The other widely used covering is veneer. Veneers are available in a wide variety of exotic woods. Remember that veneer is made of real wood cut to thicknesses of about 0.7mm. Again, board suppliers will show what is available. While both faces are always veneered, the veneers may differ or be similar. The reason for different veneers is that a cheaper veneer one side makes the board somewhat cheaper. It can be used when only one



Low chest of drawers made from cherry veneer and solid cherry

face is going to show on the application. Pictures of veneer covered boards do not seem necessary because the faces look like the associated wood. Except for kiaat and pine veneers, all others are imported.

Items made with veneer board require a finish such as clear lacquer, varnish, etc. Remember that veneer is real wood and should be treated and finished as such. It can be sanded to obtain a fine surface, but careless sanding can cut right through the veneer.

The hobbyist can make use of covered CB for a variety of projects such as wall units, kitchen and built in cupboards, furniture and much more. The pictures below show some items made from veneer covered CB in combination with solid wood.

Working with CB

CB can readily be sawn with machine saws, but it is not amenable to hand sawing and hand planing. Machining with a router poses no problems. However, when covered with melamine or veneer sawing it requires a saw with a pre-cutting blade to avoid tear out on

the saw line. The edges of CB are not appealing, and it needs treatment called edging in the trade. Board cutting firms can offer a variety of edgings for both melamine and veneer faced boards that will finish the edges to suit the application.

Medium density fibre board (MDF)

MDF is made from finely graded wooden fibres combined with resins and additives under high heat and pressure. The resulting board is more or less homogeneous throughout, although looking closely one can see it is slightly denser near the surfaces. MDF is suitable for many machining processes. It is stronger, heavier, and more expensive than CB. In fact, at least 20% stronger (screw extraction test), 20% heavier and 20% more expensive!

Probably due to these reasons MDF is not as widely used as CB in kitchen and BIC industry. MDF offers a much better edge than chip board. So much so that in many applications the edges of articles such as drawer sides are often left unedged and merely sanded

and finished. Local MDF is also manufactured to very high standards, comparable to CB, regarding densities and thickness tolerances. Available in thicknesses of 3, 6, 12, 16, 18 and 30mm. Again 16mm being the most used and cheapest (per millimetre thickness). MDF is very suitable for finishing with 'paint technique' and spray painting, such as for bathroom cabinets.

MDF boards are also sold covered with melamine and veneers similar to the options for CB. Working with covered MDF poses the same problems as for CB regarding tear out on the cut line. Raw MDF machines very well and is widely utilised due to this characteristic. We have all seen these white bathroom cabinets with various profiles on the doors and elsewhere. These are made of raw MDF which is spray painted white after machining. So-called wrap doors are also made of raw MDF which is profiled and then covered with a film of PVC foil.

Plywood board

As far as can be ascertained the available plies are, baltic birch ply, marine ply, SA pine ply, and shutter board ply. There is another ply though, and that is a very cheap and poor-quality backing ply imported from China. This is rubbish to say the least. Veneered 3mm thick MDF can be obtained but is not a ply but rather veneered board.

- Baltic birch ply is a superb product. It is made of thin cross plies of some 1.5mm thick. It is a very stable ply, unlike our local pine ply. It is not so widely available and is not a cheap material. The size of boards is 1,2m x 2,4m, available in various grades, which has more to do with appearance than quality. The grain of the outside layers always run along the 1,2m sides. Thicknesses range from 3 mm up to 25mm. A special ply called bending ply has all the grains running in the same direction. This make bending around a fairly sharp radius possible.
- SA pine ply is available from 3.2mm up to 21mm and sizes of 1,2 x 2,4m. It is not a stable product, especially



Pieces of furniture made from shutterboard



Wall unit made from beech veneer board and solid beech

in the thinner sizes. Generally it is not very attractive either, and it is not recommended for furniture.

For the sake of completeness, one must also include shutter ply (which is a pine ply). These are made in different grades depending on the waterproof ability. While some may consider it unsuitable for woodworking and furniture, the picture on the previous page proves otherwise. Wood turners have also made really fascinating items by laminating shutter board.

- Marine ply is manufactured using waterproof adhesive to enable it to more suitable under wet conditions. It contains more plies than ordinary plywood and the plies are made from harder wood. It is usually used without covering such as veneers, the outer faces being attractive as such. The board also do not have any voids. It is of course much more expensive

than pine ply (at least four times), chip board or MDF. It has its applications in the marine environment but probably not for producing furniture.

- Masonite was invented by an American named Mason and patented in 1924. In the manufacturing no glues or other adhesives are used. The wood particles are bonded by high pressure steaming and pressing on screens, which cause the well-known pattern on one side. Masonite is actually a high-density fibre board and is harder and heavier than MDF. It is only available in thicknesses of 3.2mm and 12.7mm in size of 2.4m x 4.8m. It can also be obtained with a smooth white face, at least in 3.2mm thickness suitable for kitchen cupboard backing and drawer bottoms. Tempered masonite is harder and darker in colour than the regular type. Masonite is not well adapted to cabinetry and may be put aside, except for backing.



Cutting plywood with a circular saw

General comments

The advantages of manmade boards over solid wood are manifold. Not least, that it utilises renewable wood sources to manufacture it. This is especially significant when boards are covered with exotic veneers instead of using similar solid expensive woods. The reason is that veneers are much more economical than solid wood. Manmade boards are very stable regarding expansions and contractions due to climate changes. This is important in many applications. As already mentioned above, many different facings are available. Manmade boards can be used directly, unlike solid wood that must be machined from rough to desired thickness, laminated, and sanded. Also, imagine the instability of a solid wooden board of similar size as a manmade board of 1,8 x 2,7m.

A couple of decades ago BIC's in South African homes were built in brick and mortar with steel frames and hollow core doors. These have now, thankfully, been replaced with manmade board BIC's. While the non-visible panels and shelves of BIC's will be white melamine, visible panels and doors may have coloured melamine, wrap doors (PVC covered MDF) or even solid wooden doors.

On the other hand, one should mention some cons of manmade boards. Some boards particularly chip board and MDF are not water resistant especially around the edges. The former almost always require some form of edge covering, since it is unattractive. CB and MDF are not highly adapted to screws driven into the edges, which can easily cause splitting. The Sonae specified edge screw test of CB is at least 700N (70kg). On the other hand, we know that screws driven into solid wood end grain is also not strong.

In a future article we will address ways that the hobbyist can utilise manmade boards in cabinetry.

THE UGLY DUCKLING BECOMES A SWAN

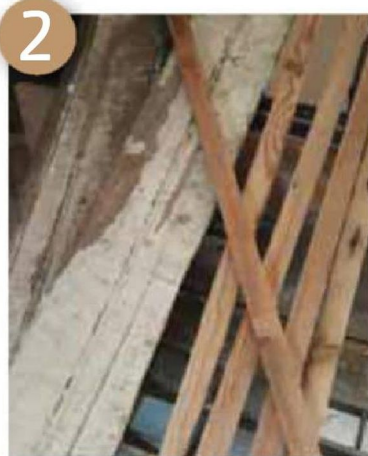
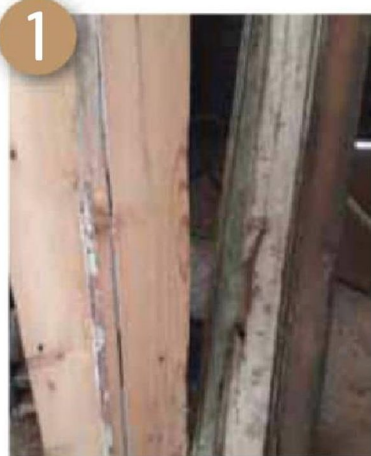
Home Handyman reader, Malvin O'Donovan, shows you how to recycle old planks

In the March/April edition of *The Home Handyman* magazine, a letter of mine was published wherein I asked some questions, made a few comments etc. I also said that the proof of the pudding was in the eating and woodworkers/readers should be encouraged to submit details/photographs of some of their recent projects. So here goes.

Recycle old planks do not burn them

Old Oregon pine ceiling/flooring boards, usually destroyed and used as firewood, should not be used so. They still have many uses and with a bit of imagination these well matured, beautiful planks, can be put to good use after cleaning up.

Recently, my one granddaughter came to me with a strange request, and after giving it some thought, I made what she had requested. The photographs show the progress and the final product, in making what she had requested from, you guessed it, old Oregon pine ceiling planks.



The ugly duckling (Photo 1) has been transformed into an attractive and useful swan (Photo 4). In her eyes at least!

"The greatest threat to our planet is the belief that someone else will save it." – Robert Swan

Regular maintenance

PREVENTS EXPENSIVE REPAIRS

For DIY enthusiasts with some time on their hands, the recent lockdown has been the perfect opportunity to get stuck in. For those who aren't as adept, it's a chance to get a handyman in while they're at home to supervise.

The irony is that while lockdown was a good time to get some much-needed home maintenance done, financial uncertainty prevented people tackling their to-do lists.

Shawn Hogan, a carpenter and project manager with nearly 30 years' experience says although money may be tight, ignoring small but essential home maintenance tasks can lead to much bigger expenses later. "It's important to distinguish between maintenance and improvements," he says. "By regularly maintaining woodwork, roofs, gutters and paintwork you can avoid bigger, more expensive problems later, such as rotten wooden doors and windows needing replaced or ceilings collapsing because of a leaking roof. Improvements, such as adding an office or renovating a kitchen or bathroom can wait until you're able to afford these."

DirectAxis' five expert tips for staying on top of home maintenance without breaking the budget are:

Differentiate between necessary and nice to have: If money is tight, limit your to-do list to things that will cost you more if not attended to. "Sometimes simple, relatively affordable tasks can save you a lot in the long run. For example, getting a dead tree felled before a storm blows it over onto your

house," says Hogan. Other jobs such as re-carpeting a bedroom can wait until you've got the money.

Prioritise, then do a bit at a time: Some tasks are more urgent than others. While sanding down and repainting woodwork will prevent it rotting and save you from having to pay more later to repair or replace it, it's not potentially as urgent as finding the source of a drip or reason for a damp spot on the ceiling.

Leaks, whether from a hole in the roof or a plumbing problem, don't go away and can get worse fast. Besides having to pay for water spurting from a pipe, leaks can cause a lot of damage to paint, carpets, woodwork and even the structure of your house. Prioritise your tasks, beginning with the most urgent and ending with those that can wait until you have more time and money to deal with them.

Find out if you're covered before committing: You may have insurance cover for some household repairs but have not realised it. If you have a mortgage bond the banks require that you have insurance to cover potential damage to the house. That's why, before paying to get a leaking hot-water geyser repaired, it's worth checking whether this is covered.

Do your homework and build a budget: If you dabble in DIY but aren't

an expert, do some research before you get started. There are plenty of how-to videos online. If you have friends or acquaintances who are better at DIY ask them how to go about things and which products to use. Speak to the experts in hardware shops and get their advice. It's effort worth making before you buy a whole load of expensive supplies that you later find you don't need or aren't appropriate for the job.

Once you have a list of what you need, shop around. A simple internet search should enable you to work out how much the hardware and equipment you'll need will cost. You can then draw up a budget to make sure you can afford to start and finish the job.

Stick to your skillset: Nobody can be good at everything and even competent DIYers should be cautious about venturing outside of their areas of expertise. We've all seen YouTube videos of people who thought cutting down the dead tree in the backyard would be the easiest thing in the world, only to have it fall on the house.

If you're not sure that you have the ability, know-how, confidence or the right tools to do the job properly and safely, rather call an expert. It could save you lots of frustration, money and more importantly risk of injury or worse.

Hanging drywall may sound complicated, but that doesn't have to be the case. Follow these step-by-step instructions and your installation will go smoothly.



How to hang drywall

Tools and materials

- T-square
- Sharp utility knife (extra blades recommended)
- Screw gun or screw setter
- Drywall screws
- Drywall knife
- Drywall mud pan
- Adhesive gun
- Drywall router (large jobs) or keyhole saw (smaller projects)
- Sanding pads or small sanding blocks
- Drywall
- Drywall screws
- Joint tape
- Joint compound
- Adhesive

Installing drywall has a well-deserved reputation for being a lot of work. However, with patience and the right drywalling tools, you can get a professional-looking wallboard installation every time.

Step-by-step guide

Step 1: Mark locations of all studs by making a pencil or a chalk line, corresponding to the stud locations, on the ceiling and the floor. Make marks large and noticeable enough so they won't get totally covered by the new drywall sheet.

Step 2: If you're hanging your sheets horizontally, measure a metre down from the ceiling and place a mark on two studs. Insert one drywall screw deep enough into each stud to hold your piece of wallboard. You're essentially making a ledge on which to rest a large piece of wallboard.

Step 3: Measure where your wallboard needs to be trimmed.

Step 4: Mark the location of your cut and use a T-square or other straight edge to score the front side of the wallboard using a sharp utility knife. Make your score fairly deep. Apply pressure to the drywall to snap it along the score line. You may find it helpful to place a piece of wood behind the drywall to brace against. Be careful that you don't rip the paper backing on the back side of the wallboard. Move to the back side of the wallboard and run your utility knife up the seam,

cutting the paper backing to finish the cut.

Step 5: Once you've trimmed your board to size and are ready to install, run a bead of adhesive down each stud. This will reduce the number of screws needed, provide additional sound deadening, and result in a stronger, flatter wall.

Step 6: Lift your wallboard and rest the bottom edge on your ledge screws and press it into place.

Step 7: Using your ceiling and floor marks as references, drive three screws through the wallboard and into the studs to secure the wallboard in position.

Step 8: Drywall screws should be properly 'dimpled' into the wallboard so that they will not be visible. Using a screw gun for larger jobs will save time and produce a cleaner result. For smaller jobs we recommend a drywall screw-setter that will properly dimple your screwheads using a standard drill. The objective is to ensure that no screwheads are sticking out above the surface. You should be able to run your hands over the wallboard and not be able to feel the edges of the screwheads.

Step 9: Place three courses of evenly spaced screws in your newly installed wallboard – one course across the top and bottom edges and one course through the centre. Use your ceiling marks as guides to ensure that every screw hits a stud. You should end up with three screws in every stud per piece of wallboard (top, middle and bottom).

Step 10: Fasten your lower piece in place using the same techniques as before, making sure that your outlet and switch boxes are all cut out and seated properly. Note that you may need to use shims to elevate the lower drywall for a tight fit.

Step 11: Any large openings for doors, entryways or windows can be trimmed out using a drywall router.

Step 12: For filling joints, a bucket of pre-mixed, all-purpose drywall compound (also known as drywall mud) is recommended. Stir the bucket to a smooth consistency and fill a mud pan with enough joint compound to make one full coat over the joint you'll be working on. The technique for finishing horizontal and vertical seams is identical. It's usually best to start with the horizontal seams.

Step 13: Using putty knife, fill the entire length of the drywall seam from one end to the other. Make sure your final product is level with neatly feathered edges. When using drywall compound, the key is to work in thin, level coats. The objective is to fill the cracks and make them as level as possible with the wallboard on both sides of the seams.

Step 14: Lay your joint tape into the wet drywall compound and smoothly lay it into your freshly mudded joint. Slightly wetting the tape will keep it from binding and ease the application process. Use one piece of tape per seam.

Step 15: With your tape in place, take your drywall knife and add a layer of joint compound over the tape and surrounding area. Make sure to completely cover the tape and make sure that you continue the process of laying smooth, thin coats that are level with the wall. The objective is to bed the tape into the first layer of joint compound while covering it with the second.

Step 16: Allow the taped seams to dry for the recommended time per the instructions on the joint compound. While the large joints are drying, fill all of the screw dimples and any other imperfections in the wallboard. You need one smooth even coat. Drive or gently hammer down any screw heads that are protruding from the wall and then cover those as well.

Step 17: Wait a full 12 hours for all of the joints to dry. You'll be able to

see that all of the drywall compound has turned totally white. At this stage, you're ready for your next coat.

Step 18: Using a putty knife, apply a thin finishing coat to every seam and every corner. This is also a good opportunity to put a second coat on every screw dimple.

Step 19: Make sure that all of your joints are level with your wallboard. You should be able to place the edge of a putty knife over any joints without seeing any light gaps underneath. Fill any low spots with another layer of drywall compound.

Step 20: Wait another 12 hours for your finishing coat to dry completely. Once that's done, you're ready to sand your joints. Use a circular sanding pad for larger jobs, or a smaller hand-held sanding block for small areas. Sand gently until you cannot feel any joints, screws or imperfections with your hands.

Step 21: Once you've finished sanding and touching up, your wallboards are ready for primer and paint.



Get your car in tiptop shape before you head on your way these holidays.

If you will be towing a trailer or caravan, pay special attention to the wheel bearings and electrical system before embarking.

YOUR SUMMER ROAD TRIP CHECKLIST

Are you planning to go on a road trip soon? Before your trip, you should check your vehicle to make sure you can have a safe trip and avoid any mechanical issues. Then you can turn on your radio, bring your favourite coffee, and enjoy the sunshine with your car. After the road trip, do not forget to check your machinery buddy again.

Before your trip

Step 1: Change the engine oil of your car

Check your oil level and the date that you may need an oil change. If it is almost the time to change your oil, then do it. A long trip can give more stress on your vehicle.



Adding extra oil will not work as changing the oil, because the sludge from your old oil cannot be cleared. If possible, the oil filter can also be changed at the same time.

Step 2: Check the fluids of your car

Make sure to check the various fluid levels in your car and make sure they are all topped off, including the oil, coolant, windscreen wash levels and brake fluids. This is an efficient way to avoid unnecessary breakdowns that could lead to possible accidents.

Step 3: Check air pressure of your car

As we all know, tyres are your contact with the road, which means that if tyre checks are neglected, severe on-road consequences may follow. The number marked on the tyres is the maximum amount of pressure that tyres can contain. If this capacity is exceeded, it may cause a tyre blowout. On the contrary, low tyre pressure may lead to wasted fuel and hotter tyres. To insert the perfect amount of air pressure into your tyres, use a gauge (available from auto stores) and an air hose (at the petrol station). This will make sure that every tyre is safe and can be changed during your journey.

Step 4: Check the tyre wear by using a tread gauge

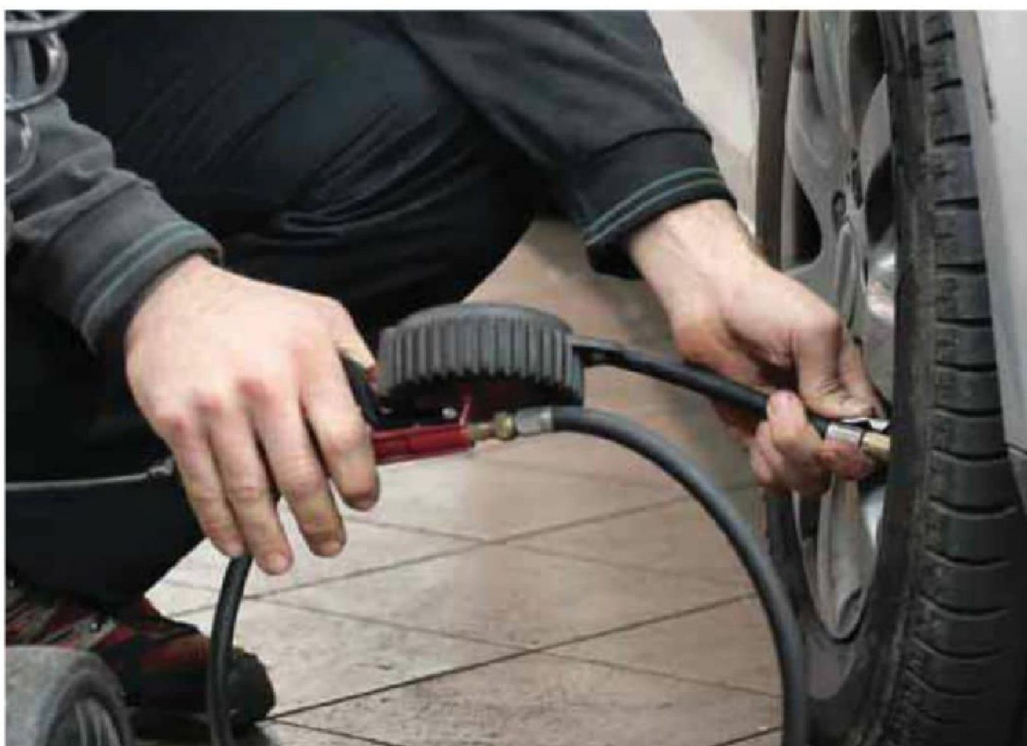
Apart from air pressure, checking whether your tyres can last the whole journey is also important. Ensure the tread is at least 1.6mm deep and if it less, it is time to use a new tyre for the journey. Worn-out tyres may blow out during long trips.

Step 5: Check the car's air filter

The car's performance and efficiency will be improved if the supply of clean air to the engine is plentiful. Also, do not forget the cabin filter since the air is not fresh inside the car if the cabin filter is worn-out.

Step 6: Make sure all car lights and signals are working

It is important to make sure all the signals are functional to avoid the accidents. Ask for another person's hand to finish this check. Sit in the car and turn on all the lights and signals and ask him or her if the lights are functioning properly. Spare



Check your tyre wear by using a tread gauge and fill your tyres up with air

bulbs can also be prepared during your trip, just in case. (At least one for each light, including headlights, indicators, reverse lights and tail lights).

Step 7: Check your battery

If the battery has not been changed for many years, check whether it can work well or not. If the sound of your starter is sluggish, it may indicate corrosion or a dying battery. Go change it as soon as possible.

Step 8: Make sure that you have all auto emergency equipment and they work functionally

Emergency equipment includes: a cell phone, spare tyre and emergency tools (like flashlights and screwdrivers).

Step 9: Wash your car

Give your car a fresh clean before the trip. This is for two reasons: Cleaning car windows is important for good visibility while driving and allows you to check the conditions of wiper blades before your journey.

Step 10: Give your car a test ride

Have a test ride on your local road to check the sounds, feel the shakes and

watch for the signs around you. The moaning from the wheels may indicate a bad wheel and a worn CV joint; the squeal from the brake may point to warped rotors and worn pads; a soft brake pedal may mean worn pads and lacking fluid levels. Do not think everything in your car is good just because you drive it every day.

After the trip

For most people, a long trip can always be spent with their families. Most families usually have week-long outings across the entire country and family members can enjoy quality time together. It is a superb way to enhance the family bond and enjoy the summer break, but when you return, it is important to check your vehicle again to maintain its condition.

Step 1: Clean up the car, inside and outside

After a few weeks on the road, your vehicle must be dirty, both inside and outside, which means that cleaning work will be a hassle when you go back home. Removing stains and spills is a hard but necessary job. After a long-term trip, the outside of the vehicle is also dirty. The bottom of the car may be covered with mud and dirt. A car wash is necessary to get your car looking and feeling good.

A handy road trip packing checklist

Sunscreen

Even during the winter months, most of South Africa gets a fair dose of daily sunshine. While the wonderful weather is one of the reasons why South Africa is such a great country for road tripping, it also means that you need to take the necessary precautions to protect yourself from the sun. Road trippers often forget to slap on some sunscreen while behind the wheel, but even though you're 'inside', you can still burn – harmful UV rays penetrate windows and windshields.

Road map

Although road maps are borderline retro these days, technology has a way of making mincemeat out of your best laid plans. We advise taking a good old road map along just in case your GPS malfunctions in the middle of nowhere, leaving you high and dry.

Water

Always have a big bottle of water on hand to keep you hydrated, especially on those long, hot drives. Dehydration can lead to headaches, dizziness and drowsiness. Make sure that you're drinking enough water to stay alert, focused and healthy on the road.

Padkos

Padkos literally means 'road food' and it's a cherished part of South African road trip culture. Travel like a local and pack classic South African padkos fare like vetkoek (deep fried pastry filled with savoury mince or butter and jam), a thermos of tea or coffee, rusks (dry biscuits), biltong (cured meat) and koeksisters (syrup-coated donuts).



Good music

Every road trip needs a rocking playlist to help keep the spirits high on those long, straight stretches of road. As part of your road trip planner, take the time to put together a playlist of your favourite tunes.

First aid kit

Having a good first aid kit on hand can be a life saver in a serious situation. It can also save you annoying visits to a doctor or pharmacy for small ailments and injuries that you could easily patch up yourself. Before setting off, check that your first aid kit is fully stocked with plasters, surgical gloves, antiseptic cream, mouth to mouth resuscitation aid, bandages, gauze, adhesive tape, scissors, tweezers, space blanket, neck brace and burn dressings. Throw in some rehydration salts, painkillers, motion sickness tablets and antihistamines too.

Mobile phone and car charger

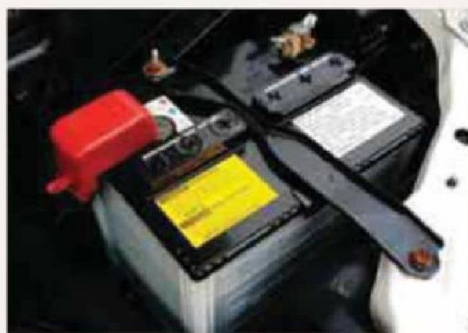
Having a mobile phone is handy in an emergency or for calling ahead to book or confirm accommodation and activities. If you don't have one already, it's worth investing in a car charger too.

Cash

Keep some cash on hand for buying souvenirs and snacks and for paying road tolls or national park entrance fees.

Torch

Travel can be unpredictable, and you might end up arriving at your campsite in the dark. A torch will make your life a lot easier when you're stumbling around an unfamiliar place in the dark.



Step 2: Repair the car if something goes wrong during the journey

You may also experience a sudden breakdown during the trip, even when everything gets prepared before travel. Stay calm when something bad happens and try to fix it so it doesn't ruin your trip. When you go back home, do not forget to get that part repaired and checked again, just in case.

Step 3: Get ready for your next journey

You may have quality time during the journey, but it is a tiring time for your car. Therefore, after taking you around different places for the visit, it also deserves a complete car maintenance, which can not only improve driving safety and prepare for the next journey but can also save you the possible

expensive repair costs and avoid emergencies. If you are tired of doing maintenance by yourself, people from car service centres can also do that for you, providing expert advice.



Make sure that you have all auto emergency equipment and they work functionally

BRIGHT IDEAS

Readers share their time-saving, space-saving or innovative ideas

Super handy gadget for welding

WINNER



A few years ago, I saw a picture of a 'third hand' – one of the most useful gadgets one can make for helping hold little pieces of metal that are difficult to clamp down when welding.

I promptly made myself my first one, then another, and another, until I had about a dozen. I made them to suit my needs. The legs are made to fit over metal parts of burglar bars or frames

that are laid out on the workbench, and they can handle extra metal such as bits of railway line, where one needs extra weight.

The big advantage to using these is that one can line up the bits of metal exactly like you want them, weld them, and they will be perfect, unlike when one holds the bits with one hand, and they move whilst welding.

Once you have first used one of these, you will wonder how you ever welded small bits together before.

A wooden version would probably work well for gluing small pieces of wood together, but that's for the woodworkers – I prefer metal, which one can weld – wood doesn't respond to welding!

Fred Hill, George

Wood biscuits

This handy tip I saw in the Woodworker's Journal: Wood biscuits will swell in the presence of humidity until they don't fit their slots, but one way to keep them dry and unswollen is to use a desiccant; those little packs of silica gel that often come in shoeboxes are perfect for this purpose. Instead of throwing them away, just put a silica pack in your container of biscuits and seal it tight. Then change it every time you get a new pair of shoes.

Another tip for wood biscuits, is to, just before you will be inserting your biscuits to glue up, put them in the microwave on high for 15 seconds. That will dry them for real. Experiment with a few first. They should be warm to the touch before using, but not hot.

Bob Triggs, by email



WIN!

Tork Craft's new TCMT006 cordless Mini Grinder Set and Multi Tool

The TCMT006 is the lightest Tork Craft Multi Tool to be introduced, that fits in your hand like a pencil, is super comfortable, easy to use and is now cordless, Li-ion powered and rechargeable. The tool can handle numerous jobs, from grinding all types of material, fine engraving, cutting, sanding, cleaning, polishing, and light-duty carving. Additional bits and bit kits are available from Tork Craft outlets countrywide.

Send your bright ideas to:

editorial@homehandyman.co.za with 'Bright Ideas' in the subject line or PO Box 24938, Gezina, 0031

Please include your name, physical address and a contact number (office hours). You may also include a photograph (300kb) of your bright idea (where applicable).

Please note: Winners' prizes may take up to six weeks for delivery and are sent by the prize sponsor. Prizes are not exchangeable.



VALUED AT R500

Congratulations to Fred Hill who wins a Quick Draw precision tape measure from Vermont Sales.

Vermont Sales (Pty) Ltd
SOUTH AFRICA'S #1 SUPPLIER
of power tool accessories



This is a great game to make with, and for, the young DIY'ers out there.



How to build a target shooting game

To make the base for the target we used a recycled MDF tabletop. The felt was purchased from a local fabric store, along with the Velcro tape. You can also buy cheap ping pong balls from your local sports store or budget store.

You may find that the balls thrown at the target bounce back because of the force of the ball hitting the wood. A solution to this was to put some recycled foam on the board first. We laid the board on the foam and used a pencil to mark out the circle, and then used scissors to cut the foam to size.

Making the rings of the target

For the circles, we used a large compass and cut out a template using craft paper first. We folded the cardboard in half on the folded felt and cut out all the circles. We used the same cardboard for each circle, just making them smaller each time. Keep the offcuts because they become handy later on.

Gluing the rings to the target

Next, we centred the first circle and used pins to mark where the spray adhesive would be applied. In the case

of this project, less is more for the spray adhesive. We sprayed a thin layer of adhesive on both sides and waited until they were tacky before putting them together.

The offcuts of craft paper came in hand for this step. You position the cardboard where you want it to be and add some pins to keep the cardboard in place. This will mark out the area where you must spray the adhesive. We used the offcuts around the pins to prevent any overspray of adhesive. It is very important to make sure all your edges are sprayed to prevent lifting later.

Even though we used spray adhesive, if we had to make a new shooting game we would sew them all together rather than using the glue. The reason for this is because it is very easy to use too much spray adhesive which makes the felt go hard. This did happen in some places... This step was repeated until all the circles were applied.

Adding the target value numbers

To add numbers to the target we bought some felt numbers and glued them to the target. On the first attempt at this project, we used foam numbers because we had some leftover from a previous project, but the balls bounced off them.

We added some drawing pins to the edges of the target to make it look more

professional. To hang the target we used some very thick fishing line that was folded multiple times and stapled to the back with a staple gun.

To tidy up the back, we cut a circle of craft paper and stapled it to the back, cutting a slot where the fishing line is so it can be pulled through.

Making the balls

To make the Velcro balls we bought Velcro tape and cut the strips in half. You add the first strip around the whole ball and then fill in the smaller gaps with Velcro.

We made six balls for our game; you can decide for yourself how many to make. Make sure your Velcro is just on the ball and not overlapping or it will lift. We

had to go back and trim ours.

Fluff up the felt

As we mentioned before, if you add too much spray adhesive, the fibres in the felt will be glued together, preventing the balls from sticking well. This was only found as an issue after we had completed the target and felt we had gone too far to start again. To fix this problem, we wrapped some Velcro around our hand and loosened the fibres again. It did make the board go a bit fluffy, but lots of use over time will cause the same look.

How to play the game

To play the game, each person has six attempts to hit the target and the score is added up. The person with the highest score wins a prize.



The supplies you will need



Covering the foam



Drawing pins keep the foam in place



Measuring the circles



More 'targets' added



Velcro tape stuck to the table tennis balls

ASK OUR EXPERTS

Our panel of experts answer your questions on DIY problems

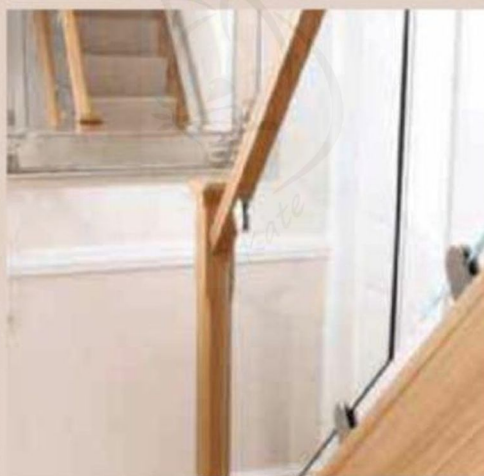


Adding glass panels to a wooden staircase

I'm looking for a bit of advice. As per the attached photos I have a wooden staircase with spindles that I would love to add glass panels to as per the sample photo also attached. Is it possible to keep the top and bottom rail and just add the necessary glass panels required? If so, where is the best place to purchase the glass and necessary brackets to hold the glass panels in place? Rather than get a company in to supply and fit it, I was thinking it would turn out a lot cheaper just to buy the necessary myself and get a joiner to fit.

John Bryan, Killarney

Ed replies: Replacing the spindles should not be a problem. You will need new fillet strips to fit the top and bottom channels where the spindles are located. You will have to fit new corner pieces at either end of the landing bannister. Clips are available online, and glass you can order from any glazing firm or hardware store but they will need templates and it will take some time because the glass must be toughened with ground edges.



Laminate floor repair

I'd really appreciate some advice on a dent on my laminate floor, which I made when (foolishly) throwing a cup on the floor in anger.

It's about 4cm long and 1cm at its widest point (see photo). I've looked at DIY laminate floor repair kits with wax etc, but they seem to be for smaller dents and scratches.

I'd be very grateful for any advice on how I can at least reduce the damage/look without replacing the whole board.

Nigel Thomas, by email



Ed replies: You could try using some of the 2-part epoxy filler in an appropriate colour but it will still be rather obvious. Unfortunately, replacing the board would be the best bet.



A subscription to *The Home Handyman Magazine*

Receive *The Home Handyman* magazine free for a year

Send us your DIY queries and you could be a winner!

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The Home Handyman DIY Queries | editorial@homehandyman.co.za or P.O. Box 24938, Gezina, 0031

Please include your name, physical address and contact number (office hours)

Please note: Queries will only be answered in the magazine. Winners' prizes may take up to six weeks for delivery and are sent by the prize sponsor. Prizes are not exchangeable.



Our winning query comes from John Bryan who wins a subscription to *The Home Handyman* for a year.

Stove tripping the electricity

I have a dual oven/stove combo. The top oven and stove work fine, however the bottom oven trips the household electricity every time I turn it on.

I've removed the bottom oven heating element. Subsequently turning on the bottom oven causes the oven light to illuminate, the control panel to operate as expected and the fan to start. From this I suspected the element to have gone to earth.

The element in question is an Electrolux EOU43002 oven 2500 W element. It's a genuine part, fitted as replacement of the factory fitted one that had gone open circuit back in November 2018. The oven is about 11 years old.

Testing with a multimeter, in continuity mode, shows no fault, as there is continuity between the terminals and not between terminal and earth.

I've tested the resistance between the terminals of the element and it's reading 22.5 ohms, resistance between the terminal and the bracket shows a brief reading before going to infinity, however, this is only apparent when the multi-meter is at its most sensitive resistance setting.

I've reached the limit of my diagnostic ability and wonder even with indications above, the element might still be faulty? If not that what might I look at next to further diagnose the issue?

Neil Downard, by email

Ed replies: I have consulted with some experts and according to them, an insulation meter uses 500 volt to test, so a multimeter would be no good as the voltage is too low.

Elements are normally mineral insulated, which is hygroscopic, so if the seal is

damaged at the ends it will draw in moisture from the air, although you may be able to heat up the element and drive the moisture out, it will just do the same again. Trying to see whether there is damage to the seals on the element end is near impossible, so in real terms all you can do is get a new one.



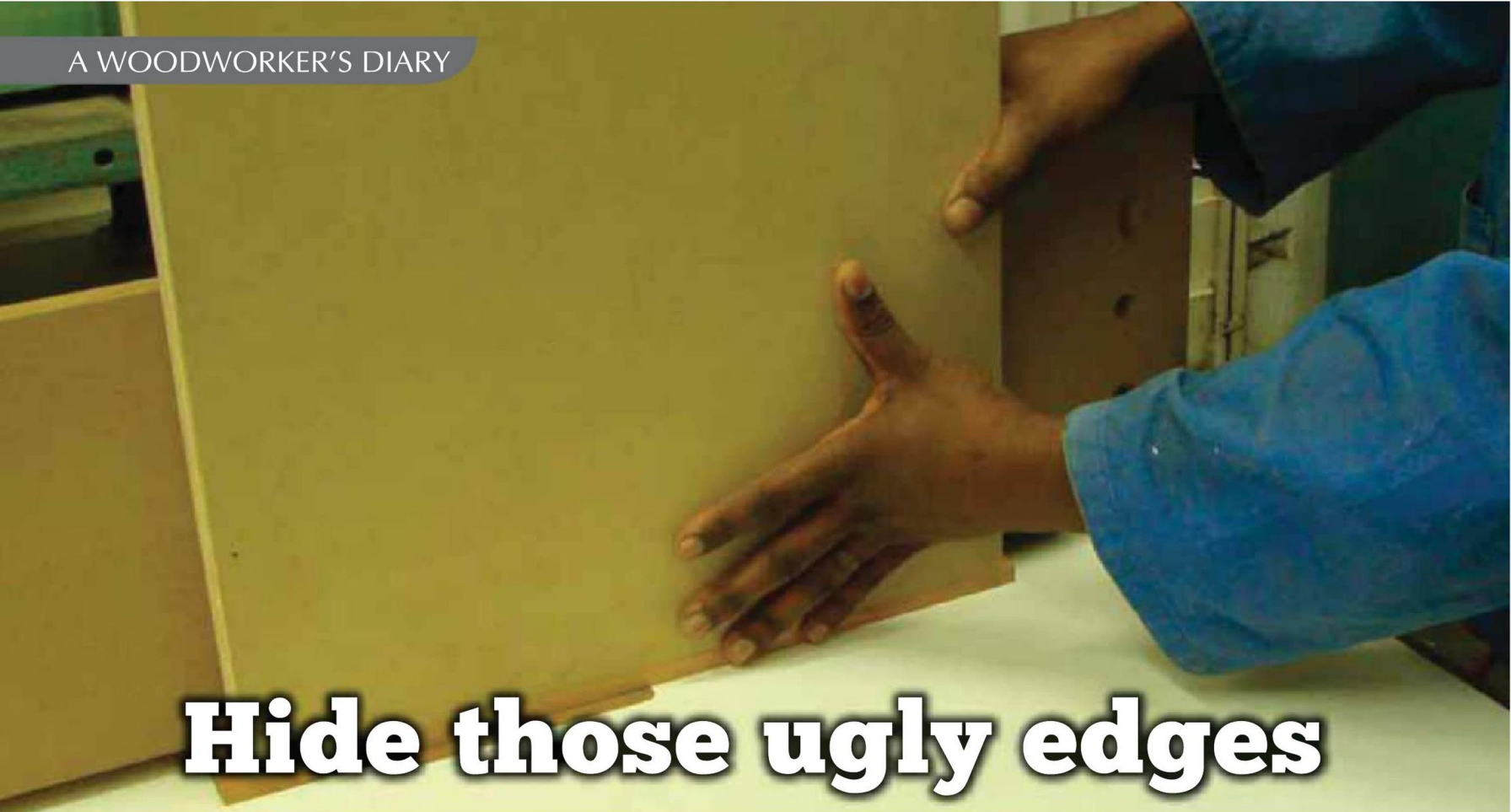
Chainsaw advice

My old electric chainsaw has finally given up, beyond repair. It was very heavy to use so no great loss. Which would be lighter, an electric or petrol replacement? I just need a smallish one as it is not used a lot but it makes life much easier.

Brian Hutton, Hermanus

Ed replies: Choosing between an electric chainsaw and a petrol chainsaw does not need to be a complicated process. Individuals in the market for a chainsaw need only weigh certain factors, such as the tasks involved, storage needs and demands, and one's own skills with a chainsaw. By carefully weighing these options, a consumer can quickly ascertain whether an electric or petrol chainsaw is the right answer for the household duties at hand. Maybe even consider a battery operated version if the chainsaw will not be used an awful lot.





Hide those ugly edges

Over the years, Denis Lock has come to appreciate the benefits of using man-made boards

>> Denis Lock

I used to be a solid wood snob. I associated veneer and man-made boards with cheap and nasty furniture. When I built my Bedfordview home some 45 years ago I did all the interior woodwork. I soon realised that man-made boards not only made ecological sense, they also made commercial sense. In many cases they also made good woodworking sense. A veneered board uses about one twentieth the volume of exotic trees that solid planks do. Some recent costs are: 16mm chipboard with red oak veneer on one face (a cheaper backing veneer on the other) – R290 per square metre; 16mm chipboard with red oak veneer on both faces – R360 per square metre; solid 25mm red oak – R660 per square. The main woodworking advantages are a very stable product, wide and flat boards – no or minimal edge-to-edge joints, much easier figure and colour match, and minimal finishing.

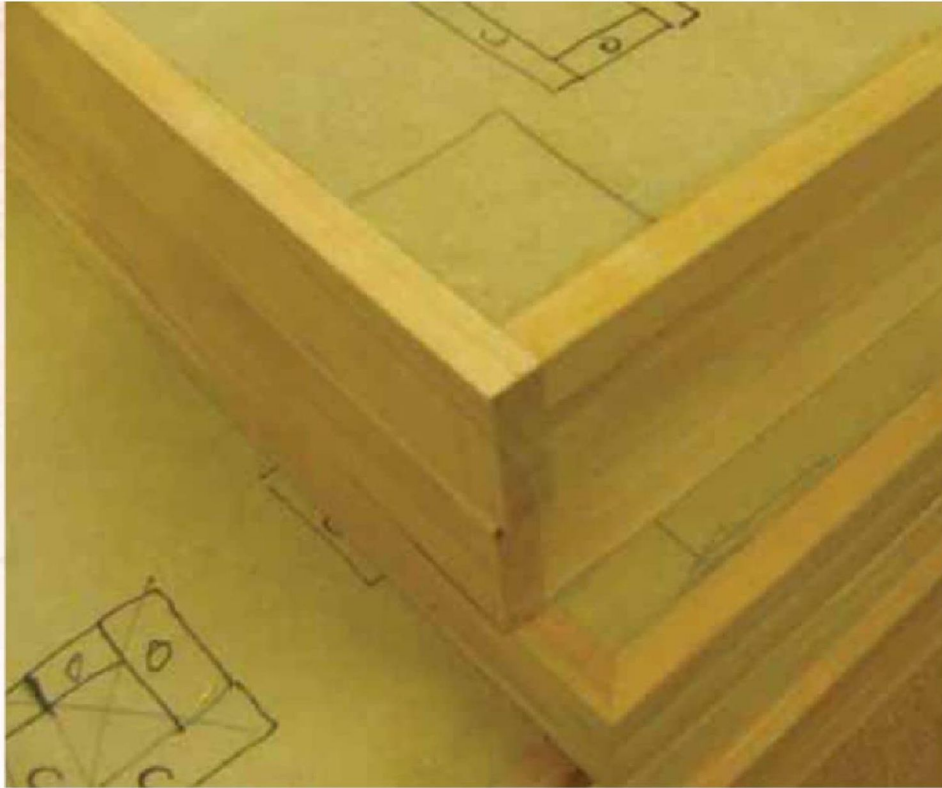
There is no free lunch. Man-made boards have two serious disadvantages. The first is ugly, weak and highly absorbent edges. The second is that they are not as strong as solid wood and shelves, for

example, are a lot more prone to sag. The edges have to be edged and shelves have to be stiffened. The board supplier will edge, at a cost, using a thin plastic veneer. The DIYer can buy iron-on edging and with a hot iron and a sharp knife do a pretty good (though generally not long-lasting) job. Iron-on edging is banned in my workshop.

Unless a piece of man-made board is fully surrounded by solid wood (a frame-and-panel door for example) I apply a solid wood edging. Most of my edging is 6mm thick. Thinner pieces (3mm, 4mm or 5mm) would do the trick but my thicknesser has a lower limit of 6mm unless I resort to using a sled. Sometimes I will rip multiple pieces of edging from a given board. More often than not the narrow offcuts (greater than 6mm) from ripping operations foot the bill. You probably use them for kindling: I save them for edging. Most of these offcuts are 20mm to 25mm wide and are perfect. As you will see shortly, I need 18mm x 6mm edging most of the time.

My last article featured a 'shoe cubby' (photo 1). The 6mm red oak edging

applied to melamine faced chipboard definitely hides and protects the ugly/weak edges. The natural wood edging combined with plain white surfaces adds, I believe, aesthetic appeal. The cherry drawer unit seen in photo 2 contains very little solid wood. The oak printer stand seen in photo 3 also contains very little solid wood. The right side of photo 3 is a closeup of the drawer fronts: 16mm oak-faced chipboard edged with 6 mm solid oak. The corner joints where the edging meets are simple butt joints in this project. As shown in photo 4 the corners can be mitred. This gives a neater finish. In photo 2 and photo 3 the edging was applied to pre-veneered board and it is obvious (but not at all unattractive) that the board has been edged. There is a different approach. Here the edging is applied to raw board and then the board plus edging is covered with a layer of veneer as shown in photo 5. I have this veneering done by a commercial veneering service or what is also called a board upgrader. The result of this approach can be seen in photo 6. I believe that the extra cost and effort of this technique is more than repaid. The ugly/weak edges of the



man-made board are hidden by solid edging but the edging itself is not apparent.

Photos 2, 3 and 6 highlight the use of edged pieces of man-made board for drawer fronts. The sides and tops of these cabinets are also pieces of edged pieces of man-made board. I also use man-made board for the sides and backs of drawers. So do others and their work often looks like the drawer in photo 7. Mine look a little better as you can see in photo 8. I edge the top and bottom of the drawer box pieces with a 6mm strip of matching hardwood. I am happy

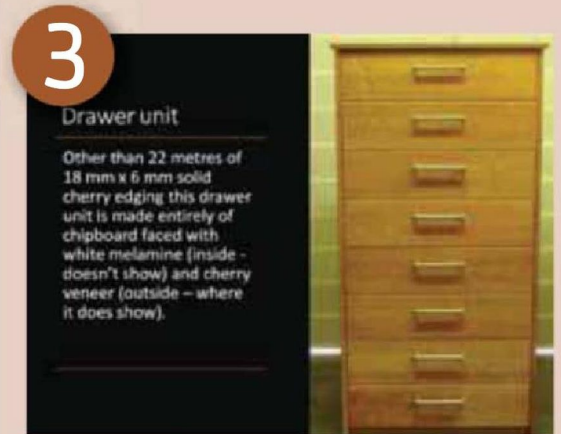
with the result: when opened most of the MDF is hidden by socks and handkerchiefs. I use biscuit joints and over the years have found them strong enough. One of the advantages of an edged and veneered man-made board construction such as the pedestal in photo 6 is that I do not have to make any allowance for wood movement. I can work to very close tolerances. Photo 9 is a close up of the front of another pedestal I made in red oak. The gaps between the drawers and between the ends of the drawer fronts and the cabinet side are a consistent 2mm and it doesn't change when the weather changes. I am going to aim



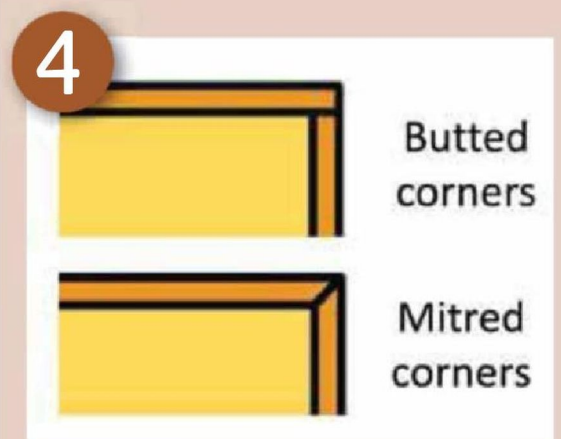
Shoe cubby



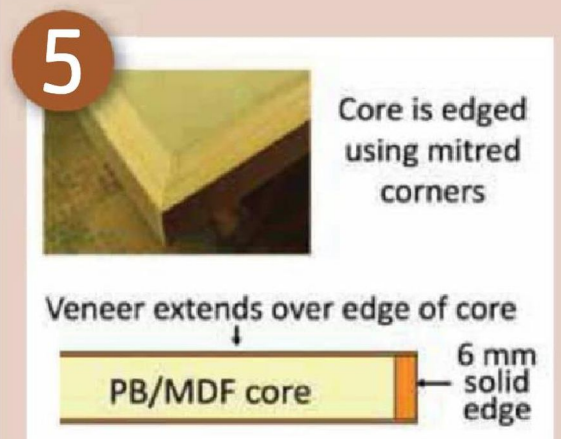
Chest of drawers



Printer stand



Corner options



Another option

6



Bedside pedestal

7



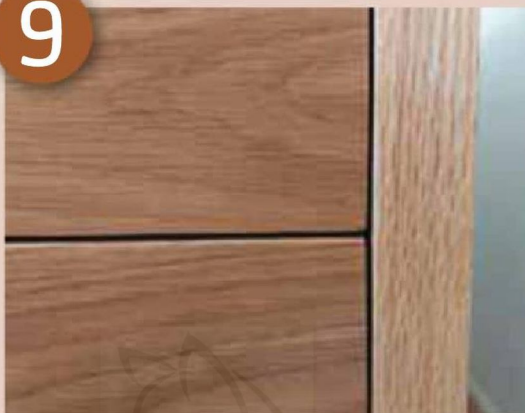
Cheap and nasty

8



Professional

9



Consistent reveal

10



Grain direction

11



Clamp pressure spread

12



Three clamps are enough

13



Router table setup

at a 1mm reveal the next time I make something with drawers.

Well? Have I motivated you to experiment with edging man-made boards? Let me share the tips and tricks I have learnt over the years. Start by ripping your edging 2mm oversize: 18mm for 16mm board. It is a lot easier to trim to size after application than trying to do an exact line-up at attachment time. I am surprised at how many woodworkers and manufacturers have not realised this and come up expensive clamping solutions. You can even buy a special two-piece router bit set to facilitate accurate line-up. How do you trim to size? Of course you know the answer: with a router! In order to get the cleanest possible router cuts you must pay attention to grain direction. Orient the length of edging so that the grain runs upward from left to right (photo 10) and mark as shown. I will leave it to you work this one out. This is the most fundamental tip, yet I have never seen it documented anywhere.

The pressure of a clamp radiates out at 90 degrees. This is shown in photo 11. This results in the paradox: the narrower the strip you are clamping the wider the caul you need. Photo 12 shows how a wide caul spreads the pressure of three sash clamps equally along the length of a narrow edging strip. I glue one edging strip at a time: fighting with one slippery joint at a time is enough for me. It is also more convenient to glue one strip, trim that strip, glue the next strip and so on. A coat of varnish on the board before being edged solves glue squeeze out clean up problems.

I normally trim the 1mm or so excess on the edging on my router table using a flush trim

bit (photo 13). I use a tall facing to my router table fence. This facing has an adjustable gap underneath it to allow space for the edging overlap that is being trimmed. Photo 14 shows the trimming being done and explains why I use a tall facing. This is also the time to work out why I insist on the grain direction shown in photo 10. For boards that are too large to handle on the router table I have made and edge trimming attachment for my hand-held router (photo 15). If you would like to make something similar send me an email (see the box below) and I will send you details.

Fitting one end of a the mitred joint as shown in photo 5 is relatively simple. I don't try and cut these small mitres on a compound mitre saw, radial arm saw or table saw. I cut them on my bandsaw and then sand them on my portable belt sander fitted with the shop-made accessory seen in photo 16. Fitting the mitre at the other end is a challenge. The edging strip must be the exact length. 'Gauge don't measure' is one of my long-time woodworking philosophies. I made a pair (left and right) gauge blocks shown in photo 17. Photo 18 shows how the gauge blocks are used to mark the length of the edging piece. After cutting slightly oversize the edging piece is sanded to fit with the accuracy shown in photo 19. The gauge blocks remain in place to position the edging strip till it is clamped. After the glue has dried the process is repeated with the other three edging pieces.

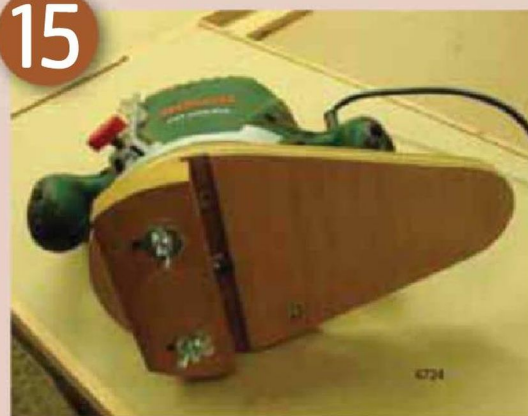
A belt sander, a router table, a flush trim router bit and some shop made accessories are all that are needed to accurately, attractively and strongly edge man-made boards. Try it: you will be more than pleased with the results.

14



Router table use

15



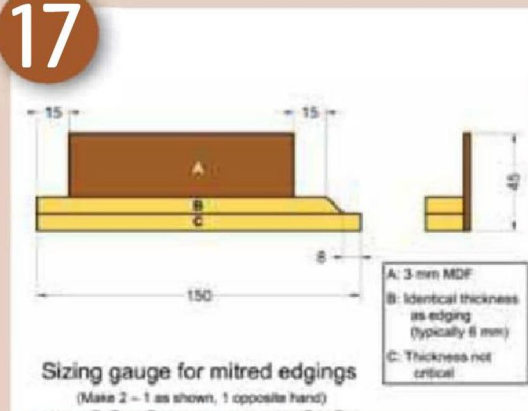
Edge trimming attachment

16



Mitre sanding attachment

17



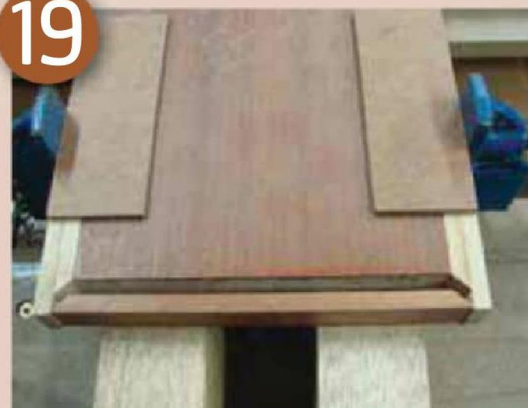
Sizing gauge

18



Determining length

19



An exact fit



ABOUT DENIS:

Denis Lock runs a woodworking school and shop. As a result of the COVID-19 pandemic he is now offering online courses. He can be contacted at denis@tacazze.co.za or 082-267-5948. Visit his website at www.routingwithdenis.co.za



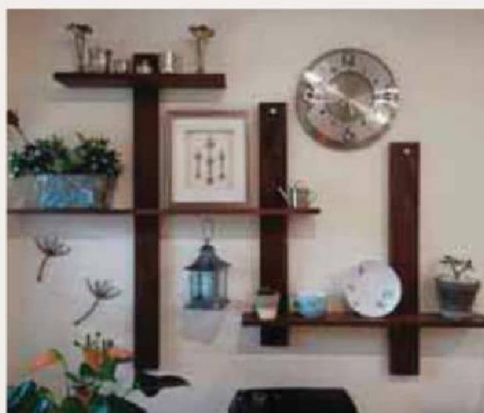
WOODWORKER'S CORNER

Sharing techniques, ideas and a love of wood

Triton Woodworking Club holds first virtual meeting



TV Cabinet by Karen Bates



Wall hanging by Karen Bates



Kiaat Frame by Kathryn Newton



Chess Board by Lode Booij



Coffee Table by Geoff du Plessis



Breadboard end Table and matching Stools by Denis Lock

Like all clubs, The Triton Woodworking Club has been forced to adapt to the challenges of the Coronavirus pandemic. Their last physical meeting was held in March, just before the lockdown, and since then they have been keeping each other updated through a very active WhatsApp group. More than 30 projects were shared amongst members, lots of tools changed hands, and the ever-useful advice and tips were exchanged.

Feeling the need for more engagement, the club had their first ever virtual meeting on Saturday the 12th September. 19 Club members joined the Zoom meeting room, and apart from the

usual pleasantries between members, the sharing through the 'show and tell' sessions worked very well. Latest projects were discussed, questions asked, and advice sought and given.

Kathryn Newton showed her first Kiaat Mirror Frame, showing the beautiful transformation of rough sawn timber into an elegant piece of furniture. Karen Bates presented a bookstand and a variety of boxes all using her finger jointer which was commissioned during the lockdown. Karen also showed a superb wall hanging, TV cabinet and matching tables. Lode Booij shared the value of grain alignment in a beautiful Maple and Walnut Chess

Board. Geoff du Plessis took members through the build process of a coffee table with 'breadboard ends', which lead into a detailed and informative presentation by club member, Denis Lock, on ways to edge table tops and construction options for table tops.

All in all, members revelled in the chance to get together and share their projects, and a follow-up virtual meeting was scheduled for 10th October to maintain the momentum of this enthusiastic bunch of woodworkers.

For more information, visit www.facebook.com/groups/tritonwoodworkingclub

Woodworking in the age of coronavirus

Scott Grove is an art furniture maker, sculptor, and YouTube personality who selectively teaches and lectures, most notably at the Marc Adams School of Woodworking and The Chippendale School of Furniture in Scotland. He recently gave advice for woodworkers, especially those making a living from their hobby, during these times we are living in. This is what he had to say:

You hear it every day: We are living through an event unlike any we have ever seen before. We need to care about our health, our family's health, and our financial health, too. Getting through these times is going to be difficult. The woodworking industry, from large manufacturing plants to mid-size businesses to one-man shops, are all going to be affected. There is no doubt about it: This is going to hurt more than a splinter under your fingernail. Still, I do see a little silver lining.

This global event is going to be around for a few months, if not longer, and the after effects could be with us for years. Weathering this storm takes a cool head and a firm hand on the wheel.

Small and one-man shops have an advantage, as these businesses can keep open as long as they can get to the shop and they have enough cash flow. All of the above issues still apply, but if



they are able to continue to work, you might reach out to larger operations to see if they need support because their employees are out, or if the large business has to close, they might hire you to help them finish their jobs.

Things to do:

- Use a time of shutdown or slowdown to clean thoroughly, like we should but never do.
- Tackle your workshop improvements. It's always tough to find the time – you've got it now. Build storage, move equipment lines, fix or manage lighting and your electrical, update your work benches.

- Get to all those projects that have never been finished and finish them. Or start them.
- Sort screws – we all have those miscellaneous junk drawers, so put on some good tunes and start organising. This project will make you more efficient when things start hopping again.
- Use this time to learn a new technique, practice skills, and test one operation against another with time studies to help improve your efficiency. Tackle a new program or app – it's always painful and time consuming, and I hate sitting on the couch watching YouTube videos (unless they're my own). Getting through a learning curve is not my idea of a good time but when I do, I am better for it.
- Maintenance: go through all of your equipment and change blades, lubricate, repair and replace broken items.
- After your shop is all squared away, connect to your creativity and make something that you've wanted to for a while. A new dresser? Jewellery box? Dining room table?

In these crazy times, it takes a cool head to prevail. We can do this together and cut through COVID-19. Stay healthy and distant.

Woodworking tip of the month – think simple

As you design, think simple. It's actually much more difficult to design something that is simple than to design something that is complicated. We have so much knowledge at our fingertips that adding difficulty and adding layers is not hard anymore.

The challenge is in finding a way to make the same thing with less. It's also in doing more with the same amount of materials. As you design your work, think about the simplest way that you can accomplish the goal, and that is your starting point.

Have you ever noticed that the best foods tend to have the simplest recipes? The simple things tend to be the best, and the same goes for woodworking. If you over engineer your project,

you make it clunky, difficult to operate, and not as much fun to use.

Think of the end user, and think of the experience that they will have with your project. You want to give them the simplest time, otherwise you are going to lose a lot of them. This also ties into designing the function. A dining chair needs to keep you off the ground while you eat, so why can't a three-legged stool do the same thing? After all, a three-legged chair never wobbles, and is very sturdy.

Thinking simple, you can solve a lot of woodworking problems without having to cram too many extra things into the design. That is one way to make your design more simple, and make it work better too. It will be easier for people to understand, and easier to make as well.

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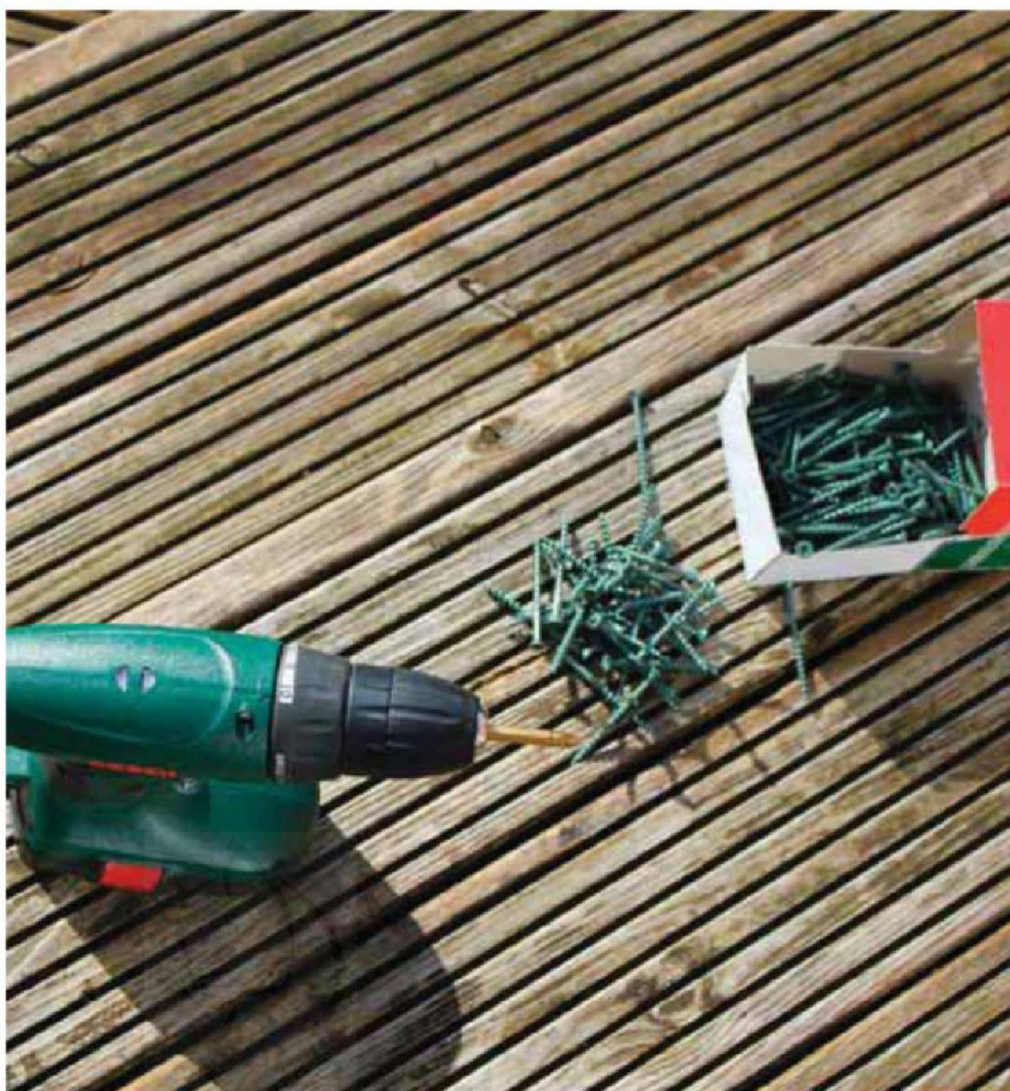
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Spicing up your tool life span

About Annalien:



Annalien started her career at the *SABC* on *50/50* before moving to Germany after she met her husband. Later, they returned to South Africa and she took on various freelance projects, eventually getting hooked on DIY. Annalien was part of the team on *The Home Channel's Get It Done!* series.



>> Annalien Grensemann

One of the things I have learnt throughout my years on the television series *Get It Done*, is the value of taking care of your tools. A tool or an accessory is like a spice. You need your spice rack to be organised, spices stored away, clean and protected from moisture. In order to get the best results in your food from your spices, they have to be looked after properly.

This is the same with power tools, hand tools, crafting tools, and gardening tools. For them to perform at their best, they have to be clean from any dust and any grime that comes with the job. In the long run, it will also save you money as your tool life will be so much longer.

So here are a few tips... Firstly, keep your tools organised and in a dry place where you can find the tool that you need easily. Peg boards work excellently for those tools that you use often, just like the salt and pepper of spices. You can see all the tools at first glance and you can reach them easily. If you do a bit of research on the internet there are quite a number of new and innovative storage ideas out there. I prefer to keep the 'saffron' and 'nutmeg' tools in their original cases they came with as they are well protected and ready to do the job when you need them.

Secondly, when you have finished your days' work, clean the tools and their accessories immediately. You won't necessarily feel like cleaning them, but it is time well spent and saves some money in the long run. Dust the tool well and clean all the dust filters and dust bags. Lubricate all the moving parts with machine oil or whatever the manual of the tool recommends.

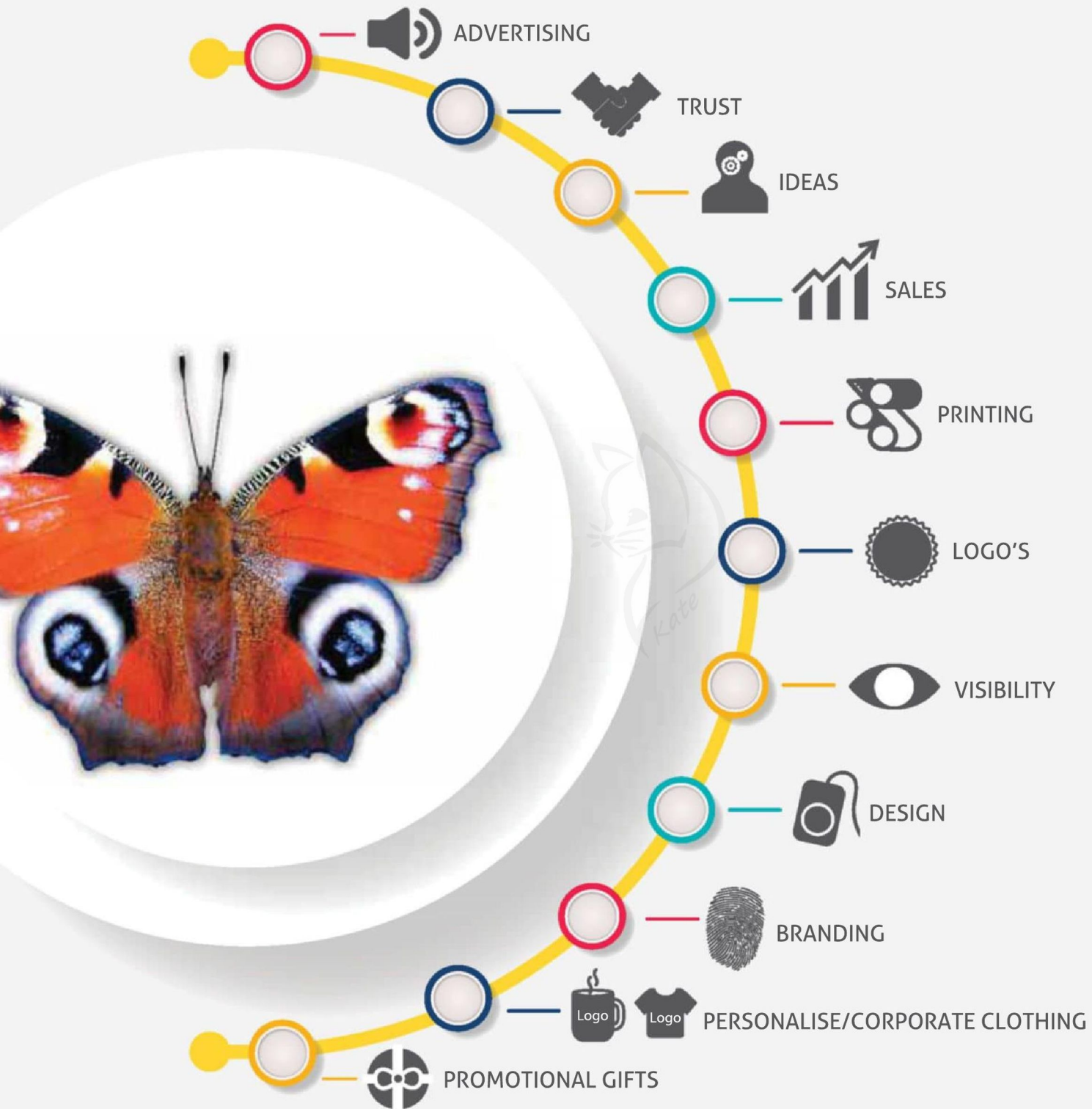
Make sure that the tool is not plugged in when you are cleaning it – stay safe. Check for exposed or degrading power cables and repair immediately.

Thirdly, do not forget those hardworking accessories. You will not get very far with a rusted and blunt saw blade, drill bit or router bit. Make sure there is no oil or dirt left on the used accessories. And when you see any rust on them, remove it with either a rust remover you can buy from your DIY store, or use white vinegar or even baking soda.

As the fresh spices give that extra flavour and aroma to your food, you will experience exactly the same joy when working with tools which are sharp and in perfect working condition.

Keep on DIY'ing until next time!

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