

The Home HANDYMAN

July/August 2022 • Vol 32 No 07



SA'S
ORIGINAL
DIY
MAGAZINE

Tile with style: Your complete tiling guide



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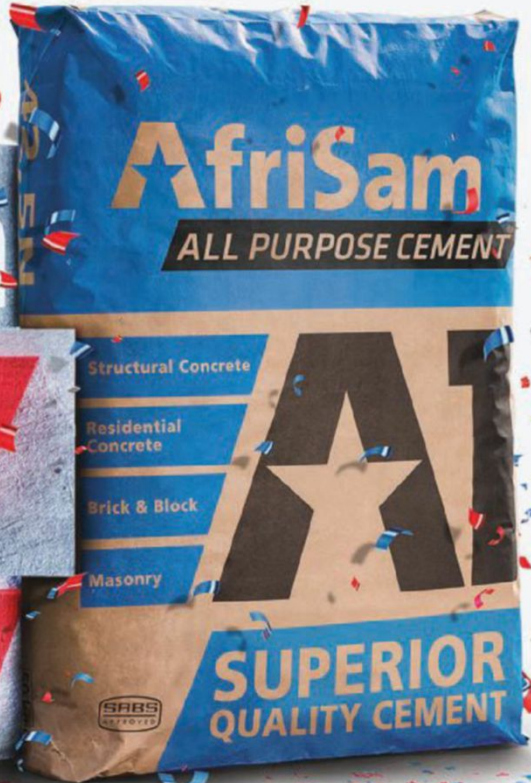
- Build a brick wall
- How to hang a door
- Making the most of MDF
- Make a pallet coffee table
- Your painting questions answered

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FROM THE WORKBENCH

In addition to the obvious, concrete benefits of a successfully completed DIY project, there are a number of valuable life lessons linked with DIY. Here are a few which might get you thinking.

First, there are no shortcuts... One thing you quickly learn is that sometimes there's just no fast or easy way to do a job right. There are an infinite number of ways to do a job fast and wrong, but the right way is often the long and painful one.

There are times in life when a quality job simply calls for a lot of thankless, time-consuming grunt work, where the only reward is knowing that you did what you had to do to get the job done right. Quite often, you'll be the only one who knows how hard a particular job or task was. But the reward is knowing that you got it right.

Secondly, it's all in the details... Do you know what the difference is (excluding sheer size) between a run-of-the-mill house and the stunning homes you see on TV and in the movies? The details. At their core, all homes are pretty much built the same, but then you add all the finishes and details. It's that fine detail work that makes a room or a home pop. It's the gorgeous floor, plus the trim, plus the tile work, plus the landscaping, all tied together. And then there are the details within details: the cabinetry that perfectly matches all the trim work, the perfect hand sawn cope joint, the furniture that fits the period detail in the home, and so on.

The details are also the things that you immediately notice when they're not done right. There's the wall paint that bled into the ceiling and the trim, the carpet with a visible seam, the floor that you can tell is not perfectly level. Attention to detail is what separates the true artist and the true craftsman from the guy or gal who just wants to get the job done and out of the way. In life, the ability to get the little details right is what sets you apart.

The old favourite: Measure twice, cut once... Nothing is more frustrating in woodworking than cutting a pricey piece of wood and finding out it's a few millimetres too short. Measure your cuts, then measure them again. Then double-check to make sure the measurement is right. Only then, when you're a million percent confident you've got it right, make the cut. Don't guess, don't assume, don't tell yourself you can always tweak it a little if you mess it up.

In other words, be sure that you've got it right. This lesson holds true in virtually every aspect of life. Lawyers, double-check those citations. Copy editors, double-check those articles. Parents, make sure those kiddos are buckled up. There's zero harm in double-checking and making sure you've got everything right before you make a decision that can't be reversed.

Finally, it's okay to ask for help... You can't know everything, and you can't do everything yourself. Some projects need an extra pair of hands or legs. Some require knowledge or experience you just don't have. And sometimes you just need somebody there to keep you company or encourage you as you work. Life and relationships are no different. At some point, everyone needs a little help from their friends. That's not just okay, it's perfectly normal. So don't ever be afraid to ask for a little help.

Of course, there are many, many more life lessons from DIY'ing – please feel free to send us yours to the usual address: editorial@homehandyman.co.za

Gregg



The Home HANDYMAN



www.homehandyman.co.za

2022 SUBSCRIPTION FORM

Subscription Fees:

South Africa	Printed	Digital
Back Copy:	R38.90 each	R29.90 each
6 months:	R227.00	R181.00
12 months:	R428.00	R359.00

Subscription fees are valid until 31 December 2022

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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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Printing D & S Press

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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OFF THE SHELF

Your guide to the latest products in the world of DIY

Go cordless with new chain saw

Makita DUC400Z cordless 36V twin battery chain saw

The Makita DUC400Z twin battery chain saw (two 18V LXT batteries installed in series to supply energy to the powerful 36V DC motor drive system) has a cutting capacity of 370mm in length and is suitable for cutting branches and pruning. The Brushless Motor provides for high operating efficiency, with a chain speed of up to 20m/s. The chain brake and variable speed trigger switch also provide high operability. This model has a similar cutting power to its petrol counterpart and is suitable for professional users. The batteries and the charger are sold separately.

Going cordless with a chain saw is not only environmentally and user friendly, the noise level is also substantially lower than a petrol model, making them ideal for use in both high density and rural areas.

As with all of the Makita 18V LXT Cordless models, this chain saw is compatible with the Makita 6.0Ah (55 minute charge time), 5.0Ah (45 minutes charge time) and 3.0Ah (22 minutes charge time) batteries.

For more information, visit your nearest Makita dealer or visit www.makita.co.za



Stop those leaks in their tracks

Plascon launches New AllSeal, a waterproofing coating with a free membrane to prevent pesky leaks

The newly formulated Plascon Allseal is an easy to use and economical acrylic sealer designed for use with an external membrane to seal and bridge cracks and prevent leaks on roofs, cement plaster, concrete bagged walls and other exterior masonry surfaces. This waterproofing system includes a free polyester membrane which is used to bridge and stop leaks on parapets, flashings, roofs joints and laps, wall and chimney cappings, as well as, seal nail heads, putting the ALL in AllSeal.

Plascon AllSeal is specially formulated with a 5-year quality guarantee, and after extensive testing shows excellent water resistance, weather and UV resistance and high flexibility so that it allows for expansion and contraction in the harsh South African climates without cracking or flaking. This means that your exterior surfaces will be protected for longer, saving you time and money. The secret is in the thixotropic gel structure which means that the waterproofing coating applies easily and allows for a thicker film build, making it impervious to the elements. Plascon AllSeal also has a water-based formulation making it the responsible choice for the environment.

Plascon AllSeal will soon be available in a low sheen finish of eight of the most popular roofing colours in Africa.

For more information, visit www.plascon.com



Inexpensive mini jig kit

The Kreg KR MKJKIT-EUR Mini Jig; the simple to use Pocket-Hole Jig

The simplistic design of this product includes the hardened-steel drill guide of the other jigs, but does not include a reference fence, so material thickness adjustments must be made manually. With an unlimited material thickness, the Kreg Pocket-Hole Jig Mini is the only Kreg Pocket-Hole Jig that does not include a positioning fence. This fenceless design allows you to make precise angle and stock depth adjustments as needed, making the Mini the most position able jig available.

With the Pocket-Hole Jig Mini, you don't have to keep removing the drill bit to clean out the hole. A wood-chip relief hole in the jig gives the removed material a place to go, so you can keep on drilling.

It comes with a plug-setting feature, if you decide to conceal or decoratively accent your pocket holes with our solid wood pocket hole plugs, the Mini's plug setting feature is the fastest, easiest, and safest way to do so.

Precise pocket holes are a guarantee with the Pocket-Hole Jig Mini because the hardened-steel drill guide keeps the bit from deflecting as it hits the workpiece.

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



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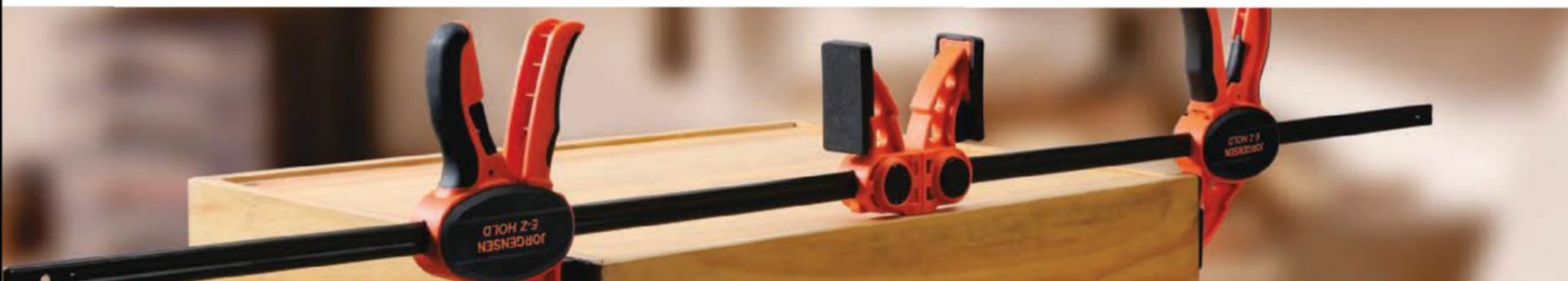
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VICES



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**Susan
Snyman**

Wins a Makita
MT M3700B Trimmer



Prizes are not exchangeable

Reviving old toys

WINNER

Over the past year I have developed a new hobby which I wanted to share with The Home Handyman readers. I always enjoy scouring second-hand shops or spending way too much time looking for bargains on Facebook Marketplace. Lately I have seen many old, vintage toys for sale, remember Fischer Price?

So, what I have been doing is buying up all the old toys I can find – plastic work benches, plastic kitchen sets, Micro Machine garages, Fischer Price airports, you name it. I then give them a thorough clean, and where needed, repaint and refurbish. I have even been able to design and print new, modernised stickers, and, where possible, installed LED lights, for instance in a fire station. I love it!

My husband isn't too pleased with all the toys ready for repair which line our passage, but it is great to see a once worn-out toy given a new lease on life. When I am finished, I put them up on Facebook Marketplace, and in most cases they are snapped up within minutes. For me, it is more about creating something which will bring joy to a child than making a profit – I joke with my family that I probably only make about R10 profit, if that, on each toy I sell! I have attached some photographs so that you can see the end results for yourself.

Susan Snyman, by email

Ed replies: That is fantastic work Susan! I remember having similar versions of those toys when I was younger, and it is great that a new generation is able to create their own memories playing with them.



What are the basics of woodworking?

While I was on LinkedIn the other day, I came across a post by a gentleman named Erhard Engelbrecht, where he talked about the basics of woodworking, and how a simple project can teach you a great deal of what you need to know. A decent practice project is to make a crate. Most casework, drawers, and so forth are changes of a fundamental box. Thus, in the event that you can make a container, you gain fundamental abilities that you will use on most tasks. Work on making little open-top boxes which you can use as advantageous stockpiling receptacles. You can likewise make a little open-top box to heat up your abilities before you start work on a more costly piece of wood on a bigger task.

To make a container, you really want to:

1. Select your wood.
2. Straighten and thickness plane the wood.
3. Saw the wood to measure.
4. Shoot the board sides and finishes with accuracy.
5. Dovetail the back and front of the crate (advance to half-daze dovetails in front).
6. Furrow and dado for the crate base.
7. Stick and collect square.
8. Finish plane the joinery.
9. Apply a finish.

There is much else to learn and refine,

however this sort of task gives you numerous essential abilities at little expense (frequently you can use scraps from your cut-off receptacle). Concentrate on the interaction. Gather the essential apparatuses. Fabricate your abilities. Afterwards, when you really want to make something professional, like a chest of drawers, you have already worked on the needed skills.

Bennie Alpert, Nelspruit

Ed replies: We sometimes take for granted how skills can be honed, even when we are not creating 'masterpieces'. Every project you tackle is a learning opportunity.

Woodworking in schools

My formal woodworking education began at school in the 1960s. At the time, somebody decided to introduce woodworking as part of the curriculum at the earliest grades. All classrooms were equipped with metal lockers that held a variety of woodworking hand tools such as crosscut saws, coping saws, hammers, squares, rulers and the like.

It was all quite primitive and taught by the regular classroom teacher as a fully integrated part of the curriculum. We were doing a unit on transportation. You took a pine board and nailed it crosswise on another board to make a wing for an airplane. You took a board and cut two 45-degree cuts at one end to make the prow of a boat. Maybe a rounded cut at the opposite end with a coping saw for the stern. If it was to be an ocean liner, you stacked up steadily decreasing size boards for the superstructure and cut dowels for the smokestacks. For trucks and cars, you nailed on hobby store wooden wheels.

Many years later, I ran into a long time woodworking teacher and asked him about the program. He remembered it and said it was widespread in the system for a number of years but had been dropped at some point. Probably a budget cut or some kid was spectacularly injured. I don't know.

All I do know is it awakened in me the concept that I didn't have to buy everything or beg my parents for it. I could make it myself. And wood was a marvellous medium to do that. It also taught me practical measuring skills and how to make

one part fit another. These days, too many kids go all the way through a dozen years of schooling without learning those basics. In some cases, such an early acquaintance with woodworking skills might open their mind to the opportunity that eventually becomes a career. But that can't happen if you don't know the opportunity exists. All these years of more and more schools closing their woodworking programs have made the demise of woodworking as a career a self-fulfilling prophesy that we have to work hard to reverse.

William Sampson, by email

Ed replies: So true William, and so sad at the same time.



Sector-specific learnerships to address essential skills shortage in the furniture sector

Nine high potential candidates have started a life-changing journey as part of the eThekweni Furniture Cluster's (EFC) Workplace Readiness Programme for Unemployed Youth. The 12-month skills development programme started in March and with the support from manufacturers in the sector, these youngsters already have potential jobs lined up when they successfully complete the programme.

According to Tamlyn Kisten, the Skills Co-Ordinator for the EFC, the content for the programme has been created based on the gaps identified between market demand intelligence from some of South Africa's major furniture retailers and the existing skills in the furniture manufacturing industry. Kisten says that this has resulted in the development of unique modules that will increase the likelihood of real career opportunities for these youngsters.

The programme features a combination of online and in-person training and includes webinars, classroom workshops, online self-study and assessments. Courtney Barnes, the Chief Facilitator for the EFC says the content is focused on building up and empowering the students with rich design skills as well as developing their leadership potential through the ability to identify and solve operational challenges.

Anusuyah Pather, Programme Manager for the eThekweni Sector Programmes Unit says that with the current youth unemployment rate of 66%, the development of new entrants in the local furniture sector is a priority for the Municipality and the Workplace Readiness Programme is an important milestone in reducing unemployment.

For more information, visit efc@bmanalysts.com



Refresh your desk with new lighting

Given the increase in remote working opportunities spurred on by the pandemic, this may mean making the shift from working in an office outside of the home, to setting up a workspace within the home.

Lighting for computer work and writing

The overhead lighting found in most rooms of the home is great for giving your dedicated workspace a general level of illumination, but it won't suffice for computer work, writing, or school projects. Whether it be a flush mount or pendant, chances are that it will likely be positioned behind you when you're seated at your desk, casting shadows on your work area. If it's a suspended design then it may even cause a glare or reflection on your computer or laptop screen – the last thing you need when you're doing hours of work at a time.

The easiest way to combat this is by adding a task light to your workspace. While an office-style lamp is ideal, a trusty bedside lamp will also do the trick. The important thing is the size and placement of the lamp. A small lamp on a large desk may not provide sufficient illumination to reach exactly where you need it, creating pools of darkness. On the other hand, a lamp that is too large for the space will simply overwhelm your desk.

Lighting for video calls

Zoom meetings have become the norm now and are sometimes



favoured in place of in-person meetings. A bad lighting setup is not only unpleasant for you to work in, but also impacts how you're perceived during meetings. To communicate effectively and professionally during video calls, you need to get the balance of your lighting layers just right.

Start with ensuring there is no window, door, or light source directly behind you as this contrast of light does not translate well on camera. You want the room to be illuminated by a general soft ambient light, so your pre-existing overhead fixture should have you covered here.

Next, avoid having your face illuminated from above or below as this causes unflattering shadows. The best lighting effect comes from placing a light source on either side of your screen. You can use two different styles of fixtures for this (for example a table lamp on one side and clip-on lamp on the other) but it's important that the colour temperature of the bulbs are the same. Typically, a temperature range of 2700K to 4500K will be most comfortable.

Equally important is the Colour Rendering Index (CRI) of the bulbs. The CRI measures how true-to-life colours look beneath a given light source, so if you appear slightly washed out in your video calls, this may be the culprit. An LED light source with a CRI rating between 85 and 100 is best. This CRI also promotes good eye health, because it gives you the ability to see contrast when reading and writing.

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

Greening the construction and décor industries: the challenge is on

From the rapidly growing 'fast furniture' industry to the often-hazardous impacts of paint on the environment, the "home sector," encompassing construction, décor and design, is under pressure to improve its performance in terms of sustainability.

According to a report by GreenCape's Waste Market Report, around 5.36 million tons of builders' rubble was generated in South Africa in 2017, a wakeup call for members of the construction and décor industries. Meanwhile, the paint industry is faring little better: in 2010, Health Minister, Dr Joe Phaahla announced that paint containing lead above a background level should be considered a Group II Hazardous substance in this country.

With this in mind, local companies in the construction and décor sectors are urged to take heed of the growing call for environmental sustainability – a call issued from consumers and government alike.

For example, government moved to ban lead – known to be toxic and carcinogenic, as well as hazardous to the environment – on 1 January 2021. While this development is heartening, the country continues to lag behind other countries globally: legislation and standards aiming to minimize the impact of paint have been in place in Europe for some time.

However, the reasons for this lag become clear when you consider that alternatives to lead-containing paint can be 300-400% more expensive, which is why it is imperative that companies continue to place green issues on the agenda by making more alternatives available. One company which has done just this is Universal Paints, which removed lead from all its paint formulas long before legislation made it obligatory to do so.

The company has introduced a host of other processes to ensure greater sustainability, too. "Our factories are fitted with air filters to ensure that no dust particles enter the atmosphere. Added to this, the wastewater is treated at an effluent plant, where solids are removed and clarity restored before the water moves on for further treatment at municipal water works," says Terence Murray, Operations Executive at Universal Paints.

The company has also turned its attention to Volatile Organic Compounds (VOCs), one of the chief culprits when it comes to environmental and health issues. Murray says that Universal

Paints' water-based range falls within the 'minimal' VOC level, according to guidelines set by REACH Regulations, which states that paint must contain less than 250g of VOC per liter to be considered 'safe'. "Our water-based paint falls well within this range, with VOCs tallying up at 0.003% to 2.000%, meaning that we have minimal to low VOCs."

Vinette Diab, Founder and CEO of DIYgirls - a turnkey interior design and manufacturing company, is also a strong believer in finding alternatives to damaging materials. She points out that, when considering sustainability, manufacturers need to think about what happens to their products after purchase: how will these items be disposed of, eventually? "Discarded items ultimately end up in landfills, which is why it is imperative to invest in products that will stay fresh, for longer," she states.

She encourages industry players to make careful choices when it comes to manufacturing and procurement. DIYgirls favours high performance fabrics that are known for their durability, sustainability and stain resistance. "We choose eco-friendly fabrics that is restorative and regenerative. Many of these fabrics are produced from plastic waste that has been harvested from our ocean and beaches," says Diab, pointing out that these are not only environmentally friendly, but also play a part in the circular economy. From the consumers' point of view, they have a luxurious, tactile appeal, and are no more expensive than other long-wearing fabrics.

For more information, visit www.universalpaints.co.za and www.diygirls.co.za



Starting a new tiling project can seem daunting. Where do you start? How do you start? Here you will find out how to select the right tiles as well as how to actually lay out your new wall and floor tiles. Start planning your tiling project now!

YOUR COMPLETE TILING GUIDE



What you will need

- Spirit level
- Measuring tape
- 5 x 2.5cm battens (for marking out tiles)
- Tile cutter
- Pincers (for nipping off the edges)
- Tile adhesive trowel
- Grouting squeegee
- Sponge
- Spacer pegs
- A mechanical tile cutter may be required for porcelain, natural stone products, limestone, marble, granite, slate etc.
- Tile fixing trim (available in coloured PVC and metals), bath seal, pre-formed movement and control joint profiles will make your job look more professional.

Wall and floor tiles have been used since ancient times; they are hardwearing, easy to clean, water resistant, hygienic and very attractive. Even experienced amateurs used to hesitate at the thought of applying tiles, but the advent of modern tile cutting tools and adhesive now makes the job much easier. This easy step-by-step guide will give the inexperienced the courage to tackle the job and give those with more confidence some tips to avoid common mistakes. If you read this guide carefully, use the correct tools and take your time, you should be able to achieve a reasonable standard of tiling.

There are several different types of tile available and they vary in their technical properties:

Glazed tiles: Glazed tiles are the obvious choice for walls in bathrooms, kitchens and laundry areas. Glazed tiles are attractive on conservatory floors and in reception rooms but may not be

suitable for potentially wet or outdoor use or heavy traffic floor areas.

Unglazed tiles: Generally used in domestic and industrial installations and are available with a slip resistant surface profile for floor tiling in wet areas. They are usually wear, stain and frost resistant; making them ideal for laundry and utility rooms, bathrooms, playrooms and garages

Porcelain tiles: Extremely attractive and very hardwearing tiles that have extremely low water absorbency. Available as wall or floor tiles, sometimes glazed often with good anti-slip properties, they can be used internally and, providing they are of sufficient slip resistance, externally. These tiles are suitable for domestic and commercial use.

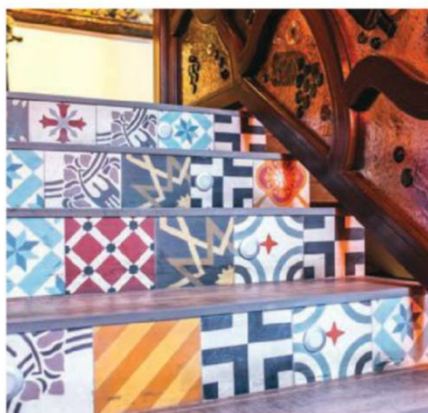
Quarry tiles: Made from natural clay, some are frost resistant and they may be used for floors internally and externally. Their natural clay surface usually

provides good slip resistance and they are extremely hard wearing.

Terracotta tiles: These are made from natural clay and vary in water absorbency but generally they are used for flooring and are unsuitable for exterior use, as they are not frost resistant. Most terracotta tiles require surface sealing before and after installation.

Mosaic tiles: Small pieces of ceramic, natural stone or glass usually sold in sheets on a mesh backing or paper facing for ease of fixing.

Natural stone tiles: Natural stone tiles include limestone, marble, granite, slate, travertine, quartzite and sandstone. Whilst some natural stone tiles are extremely hard wearing the performance of these materials does vary. Some natural stone tiles may require the use of adhesives and grouts specifically designed for the installation of natural stone tiles. Natural stone tiles should be sealed before grouting.



How many tiles do you need?

First measure the area to be tiled and calculate the area in square metres. Tiles are produced in batches, and it is important to make sure you have enough tiles from the same batch for your project, so order slightly more than you need. Any extras can be stored for future repairs. Check the batch number on the packaging as soon as you take delivery to make sure the tiles are from same batch.

When calculating irregular areas, divide the area into smaller regular rectangles.

$(X1 \text{ metres multiplied by } Y1 \text{ metres}) + (X2 \text{ metres multiplied by } Y2 \text{ metres}) + (X3 \text{ metres multiplied by } Y3 \text{ metres}) = \text{Area in square metres.}$

Adhesives and grouts

There are many different types of adhesive and grouts available on the market. As all conditions vary, it is most important that you seek advice so as to use the correct type which will work for your particular project.



Special considerations for both wall and floor tiling

Showers and wetrooms: In wet situations particularly in bathrooms around the shower it is essential to tile onto an already water-resistant background such as tile backer board. Porous backgrounds such as plaster or plasterboard can be made waterproof by using a tanking (waterproofing) system. These are usually available from the same supplier as the tile adhesive you plan to use.

Large format tiles: With the current popularity of large format tiles it is important to make sure the background is flat, plumb and true before tiling begins. It is also worth bearing in mind that the tolerances for the tile are based on a proportion of the size of the tile. When fixing large format tiles it is essential to use the correct adhesive and ensure as near as possible 100% coverage of tile adhesive, buttering the back of each tile as you fix the tiles. Large format tiles may not be suitable for fixing in a brick bond pattern.

Thin tiles: Advances in technology in the tile industry has allowed for the introduction of thin tiles, which can vary from 3mm to 5.5mm in thickness. Whilst technical standards are being introduced on the product and fixing method it is important that you seek advice from the tile manufacturer and the tile adhesive manufacturer before fixing thin tiles.



Whilst some natural stone tiles are extremely hard wearing the performance of these materials does vary

Fixing wall tiles

Preparation: You will need a perfectly flat surface for tiling. Do not cut corners - preparing the surface is vitally important.

1. Tile backer board is an inert board suitable for fixing tiles in most domestic situations; make sure you follow the manufacturer's installation instructions so they are adequately supported.
2. New plaster should be left for four weeks and be thoroughly dry and brushed down before tiling. Old plaster is suitable, provided it is sound. Check with the tile adhesive manufacturer whether or not the plaster requires priming before tiling can begin. The weight of tiling should not exceed 20kg/m².
3. Plasterboard is suitable for walls provided it is well supported with the board being a minimum thickness of 12.5mm. Fix the tiles directly on the paper facing, do not skim with finish plaster. The weight of tiling should not exceed 32kg/m².
4. Painted surfaces. It is very important to make a detailed examination of the surface, as the permanent success of the installation is dependent on good adhesion between the paint and the surface to which it has been applied and between any substrate and basic structure. Remove any old wall covering and flaking paint. Fill in old cracks and voids with a suitable filler. Ensure the surface to be tiled is smooth, clean and free from dust, dirt or grease.

Setting out: Planning ahead is essential for a good result. Take a long length of timber, mark the tile widths to help you identify where the tile will start and finish, remembering to leave space for the joints, which must be at least 2mm wide. Set out horizontal position of the tiles so that the same size cuts are made either side of windows etc. Avoid small difficult cuts as they can spoil the appearance. Plan each wall carefully,

remembering that any patterns/designs will need to be matched in the corners of the room. For plain tiles each wall should be centralised avoiding any small cuts.

1. Find the lowest point of the base you are working to (skirting, bath top, work surface etc.) with a spirit level.
2. Place a tile against the lowest point and draw a line on the wall along the top of the tile. Note: The start point of the line will depend on the setting out of the tiles, as the tile against the floor may be a cut tile.
3. Nail the batten along the wall to this line. Use the spirit level to ensure it is level. The first line of tiles will rest on this batten.
4. Draw a vertical (plumb) line at the centre of the wall. Use this to check that the tiles are in line vertically.
5. Spread the wall tile adhesive using a tile adhesive trowel onto the wall. Work in small areas a metre at a time, so that tiles are fixed before the surface of the adhesive forms a skin. Press and twist the wall tiles into the adhesive starting at the bottom and working upwards, one row of whole tiles at a time, using spacers (if required) to ensure a uniform joint. Check the horizontal and vertical

lines with the spirit level every few rows.

6. Remove surplus adhesive from joints to allow room for grouting and complete the tiling.
7. In awkward locations it is often easier to apply the adhesive onto the back of the tile instead of the wall. For complicated shapes make a template and transfer the design to the tile.
8. If the tile does not have a glazed edge, a neat finish on external edges and corners can be achieved with the use of tile fixing trim incorporated at the time of tiling. To prevent the seepage of water around baths, basins and plumbing equipment such as shower taps a plastic sealing strip or silicone sealant should be used.

Grouting: Do not begin grouting for at least 24 hours after fixing unless using rapid setting and hardening adhesives. There are many types of grout, so ask your retailer for the correct grout for your application, especially when using highly glazed tiles. Force the grout into the joints using a grouting sponge. Do not use rigid spreaders as these can cause scratching to certain tile glazes. Remove surplus grout from the surface with a sponge. Polish with a dry cloth.



Remember to leave space for the joints

Fixing floor tiles

Preparation: Time spent on proper preparation makes the fixing easier, quicker and ensures a better finish.

Setting out: Planning ahead is essential for a successful project. Laying floor tiles will raise the level of the finished floor, so if possible remove all fixtures before tiling. Check the overall flatness of the floor. A levelling compound can be used to improve flatness levels. Mark a chalk line on the floor down the centre of the room parallel to the most suitable wall (normally this is achieved by viewing the room from the doorway).

Lay the tiles down this line and then work towards the wall you think is best, leaving a joint between the tiles of at least 3mm. Tile spacers can be used to achieve a uniform size joint, however they should be removed before grouting. Avoid small cuts, as they can be difficult to cut and do not look professional.

Cutting tiles: Floor tiles are generally harder to cut than wall tiles. Modern tools make the cutting of most types of ceramic tiles simple.

Adhesives: Mix the adhesive as per manufacturers' instructions and spread with the recommended notched trowel to give a ribbed adhesive bed on the surface to be tiled. Butter the back of each tile with a thin layer of adhesive immediately before bedding it firmly into the fresh ribbed adhesive bed with a slight twisting motion to ensure a solid bed and prevent voids under the tile. Some 'solid bedding' trowels and pourable adhesives are available that allow the floor tile to be solidly bedded without the need to butter the back of the tiles.

Remove surplus adhesive from the tile surface and joints with a damp sponge or cloth. Work in small areas of about a square metre at a time so that tiles are fixed whilst the surface of the ribbed bed is still wet and workable. Every so often use a spirit level or straight edge to check that the tiles fixed are flat. Remove and

adjust the amount of adhesive to achieve a flat surface, but don't leave it too late or the adhesive will set. Leave adhesive to set before grouting (usually 24 hours unless using a rapid setting adhesive). In bathrooms, special attention should be paid to sealing the gap between wall and floor base using a flexible antibacterial sealant.

Grouting: Do not begin grouting or walk on the floor tiles for at least 24 hours (unless using a rapid set adhesive) to avoid disturbing the tiles before they have bonded completely with the adhesive. There are many types of grout so ask your retailer for the correct grout for your application. Force the grout into the joints using a squeegee.

Remove surplus grout from the surface with a sponge and, if required, peg the joints with a rounded stick to achieve an even better finish. Note: When grouting tiles on a timber floor, use a water-based polymer admixture to improve flexibility.

Movement joints: Movement joints allow for movement and help to prevent tile damage. The recommended minimum width is 6mm, but it depends on each individual application. Movement joints are either field-applied sealant, or a prefabricated profile with anchoring legs which are adhered beneath the tile. Movement joints are normally installed where flooring abuts wall, steps, columns etc., on large floor areas and over structural movement joints. Floors less than two metres between walls will not normally require movement joints except where there is under tile heating.

Maintenance: With proper care and attention, a correctly installed, good quality floor tile should give many years of trouble-free service. Grit is the biggest enemy of any floor material and a mat adjacent to external doors is strongly recommended. Terracotta and natural stone tile tiles may need sealing.



Floor tiles are generally harder to cut than wall tiles. Modern tools make the cutting of most types of ceramic tiles simple

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ROLL WITH IT

Find out how to make a scrap wood toilet paper holder

>> Brandon Walker

I had a bunch of scrap wood laying around and I figured I may as well use it up. I cut all the pieces to 150mm width on my table saw, but you can change the sizes to your requirements. I then cut them to length I could use based sizes of the wood I had available. I decided to use a couple different joinery methods on this piece; one being mitres on two corners.

I always like using a digital gauge to make sure that my blade is set at exactly 45-degrees. I cut one at the very top of each side and on one end of the first shelf.

After I had the 45-degree angles cut where they needed to be, I measured and marked where I would cut dados for the shelves. Instead of measuring I used the actual shelf to make marks where the dados needed to go.

I chose the appropriate dado blades to create the same size dado as my shelf and installed the dado stack in my table saw. If you don't have a dado stack you can use a regular blade and make a pass on each side, then several passes to clear out the middle. Then I set the blade to 6mm high and cut the dados.

For the mitres I decided to just use a biscuit jointer for these. There wouldn't be much stress or weight on these shelves so this should work just fine. Furthermore, the biscuits help line up the joint and provide a small amount of strength.

I made sure to pre-sand some of my pieces (especially the inside) before assembly. It is much easier. I used tape to line up the joints and then I glued them up. I did the glue up in two steps. They make clamps for mitre joints, but I feel like I have better control using regular squeeze clamps. First, I glued up the lower mitre and all the shelves. The second one I did the top mitre to attach the upper shelf using the same method.

Once everything was glued up, I turned my attention to the actual toilet paper roll holder. I cut some more scrap to width. Then I made marks to form an L-shape to keep the toilet paper from sliding off the end.

To cut the shape out I took it over to the band saw. Once I had the rough shape, I used my rasp to shape it.

I sanded the areas where the holder would be, so I didn't have to do it later. I measured and marked



where the hole would go to mount the holder. I made sure to predrill the stand and the holder itself so there wouldn't be any splitting. I also decided to plug the hole, so I drilled a 10mm hole to allow for the plug. Once I had it attached with a screw, I installed the plug with some quick setting glue.

While I waited for the glue to dry, I sanded the whole stand to get it ready for finish. After the glue was dry, I flush cut the plug and then sanded so you can't see the screw from the outside. Plugs are a good finishing touch, so you don't see the screw head sticking out.

I decided to try out an oil furniture 'butter' on this project and I really enjoyed using it; it was so easy to apply. Basically, you just wipe it on then, after a while, you wipe off the excess.



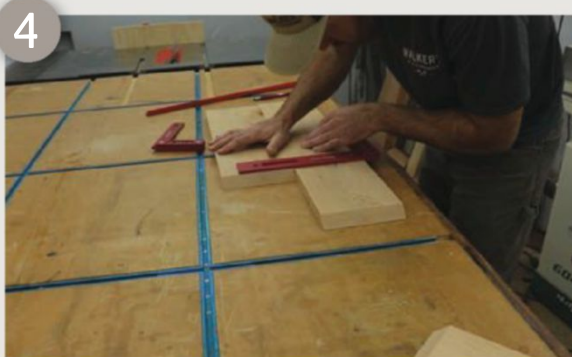
Cut your wood to size



I always like using this digital gauge to make sure my blade is set at exactly 45 degrees.



I cut mitres at the very top of each side and on one end of the first shelf



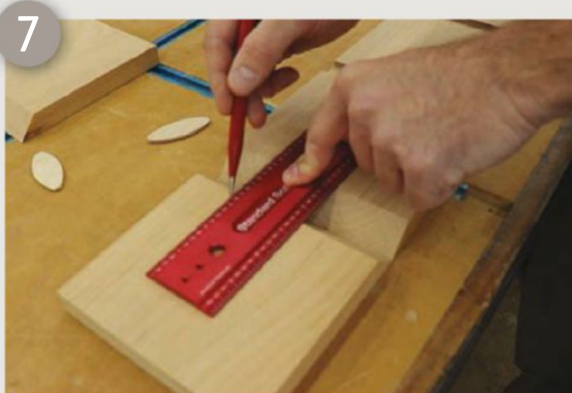
I measured and marked where I would cut dados for the shelves



I used the actual shelf to make marks where the dados needed to go

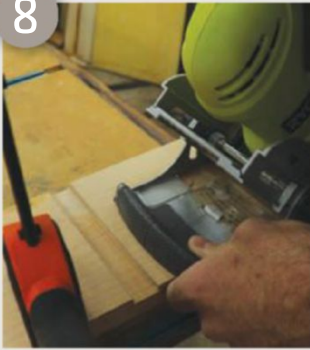


I chose the appropriate dado blades to create the same size



For the mitres I decided to just use a biscuit jointer for these

8



The biscuits help line up the joint and provide a small amount of strength

9



I made sure to pre-sand some of my pieces

10



I used tape to line up the joints

11



Then I glued them up

12



First I did the lower mitre

13



And then the shelves

14



They make clamps for mitre joints, but I feel like I have better control using regular squeeze clamps

15



Then I did the top mitre to attach the upper shelf using the same method

16



Once everything was glued up, I turned my attention to the actual toilet paper roll holder

17



Cut your holder to your desired length

18



Then I made marks to form an L-shape and cut it out with a band saw

19



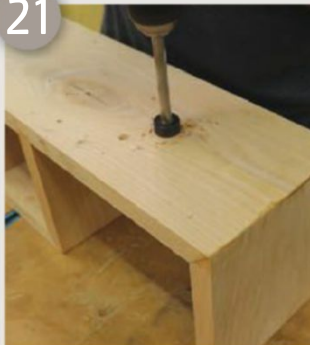
Once I had the rough shape, I used a rasp to shape it

20



Mark where the hole would go to mount the holder

21



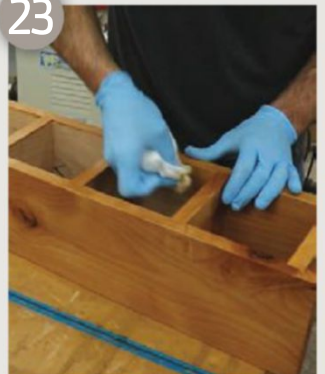
I also decided to plug the hole

22



Once I had it attached, I installed the plug with some quick setting glue

23



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This damp proofing guide will provide all you need to know about damp problems and how to solve them.

WHAT IS DAMP PROOFING?

The four main causes of damp are rising damp, penetrating damp, condensation, and underground water ingress, and we will outline how to fix them all.

If you spot peeling wallpaper, tide marks on your wall, bubbling plaster or paint, black mould or discoloured patches on your walls or ceiling then the chances are your property needs some kind of damp proofing.

A wide-array of structural and plumbing problems can cause the symptoms listed above and a professional damp surveyor will be able to identify the source of the damp and recommend the appropriate solution.



Damp proofing walls

Most people start to think about damp proofing when symptoms of damp start to appear on their internal walls. Damp on walls causes aesthetic damage to paint, plaster, wallpaper, skirting boards and other fixtures and fittings but it can also lead to more serious problems such as rot which can affect structural timbers.

Other problems associated with damp walls include exacerbated symptoms of asthma and other respiratory conditions and poor energy efficiency with higher bills as a result. If you notice damp walls in your property then we recommend acting fast to resolve the issue. Generally speaking, the sooner a damp wall is repaired the less deterioration it will suffer.

The excess moisture that causes damp walls can come from various, such as:

- Humidity caused by poor ventilation
- Faulty roofing, gutters and down pipes
- Bridged or damaged damp proof courses
- Damage to foundations from tree roots or invasive weeds
- Damp cavity wall insulation

How to fix water ingress with Sika

Using Cemflex and Sikalite as a damp-proofing system will guarantee that you will get rid of your damp for good.

Step 1

All existing finishes are to be taken off the walls. Walls should be broken back to concrete or brickwork.

Step 2

Entire area should be cleaned and prepared for plasterwork. Once cleaned dampen surface with water.

Step 3

Brush the first layer of the Cemflex slurry onto the surface and allow to dry for around 6 hours. (See datasheet of Cemflex for mixing instruction and mix ratio.)

Step 4

Apply a second coat of Cemflex slurry that will act as a bonding agent. Wait until the second coat is tacky before applying the plaster mix. Sikalite is added to the plaster mix as an integral waterproofing agent.

Step 5

Allow to dry completely before attempting to coat. In severe cases sometimes three layers may have to be applied.

TIP:

In cases of rising damp, you may have to treat your floor screed to prevent moisture creep across the floorscreed.

Guideline ratios:

Cemflex slurry = 1 litre Cemflex + 1 litre water + 3.4kg Portland cement = 6 - 8m

Sikalite = 1kg Sikalite to 50kg cement and two and half wheelbarrows of good plaster sand



For technical advice, contact Sika on 031-792-6500 or download the technical datasheet from the website, www.sika.co.za

Types of damp and damp treatments

Identifying the exact type of damp proofing you require can sometimes be difficult for those who are not professionally trained. Symptoms of conditions like penetrating damp, rising damp and condensation can look remarkably similar but all require different damp proofing techniques to solve.

That said, when most people talk about 'damp proofing' they are usually referring to a remedial damp proof course. This is a type of waterproofing where a barrier is placed in a wall to prevent rising damp. There are many other types



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BUILDING TRUST



of damp proofing treatments available though, and each is suitable for different types of damp.

Many homeowners will have heard of a damp-proof course, waterproof membranes or positive input ventilation unit but far fewer would know when to apply them.

What is a damp proof course?

A damp proof course (DPC) is a damp proofing treatment used to treat rising damp. Damp-proof courses can be repaired or installed with a few different methods but the most popular and well known is the damp proof injection.

A damp proof course is only effective against rising damp and will not help other damp problems such as condensation or penetrating damp, so we would always recommend contacting an accredited surveyor to develop a treatment plan before getting a damp-proof course installed. It should be noted that rising damp is regularly misdiagnosed by untrained tradespeople, so by discussing the problem with a qualified company you could potentially save yourself from any needless and ineffective treatment.

What is a damp proof membrane?

A damp proof membrane is a high density polyethylene which is impermeable to water ingress and the any contaminants associated with this problem. This makes damp proof membrane an ideal material in the treatment of damp problems such as penetrating damp and rising damp.

The membrane is secured to internal walls after the source of the water ingress has been repaired and its bumpy surface creates a cavity that allows moisture to evaporate from the wall behind. These membranes are also used in structural waterproofing projects in basements and cellars as part of a cavity drainage system.

How to stop condensation

If your property is damp because of condensation you are likely to see excess water on your windows and black mould on your walls and window frames. This condition is common in humid rooms such as the bathroom and kitchen where water vapour (steam) particularly prevalent.

Stopping condensation can be as simple as opening windows, keeping lids on boiling pots or shutting the door when having a bath or shower. That said, persistent condensation problems that cannot be shifted through lifestyle changes can be solved professionally with the installation of mechanical ventilation units – these can range from basic extractor fans through to positive input ventilation systems.

How to treat a damp basement or cellar

When it comes to damp proofing an underground space it is common to see the process referred to as waterproofing as opposed to damp proofing. This is because basement waterproofing systems are often very different from the systems used to treat damp problems above the ground.

Concrete tanking systems and waterproof membrane and drainage systems are common solutions for keeping a basement or cellar dry and these work by holding back or managing water ingress from earth retaining walls.



Do I need professional damp proofing?

Put simply, if damp problems are left to develop and worsen they can cause serious damage to your property. For this reason, we would always recommend that any damp proofing contractor you use is experienced and qualified for the job.

Damp treatment process

From the initial damp survey to completion of any damp treatment, qualified surveyors and highly trained technicians will usually offer the following:

- Identification of the damp issue
- Determining and treating the source of the damp
- Full consultancy resulting in a bespoke treatment plan that takes into account your property's needs and your budget
- Carry out any necessary internal and external repairs
- Removal and replacement of any damaged plaster
- Help and advice for safeguarding and maintaining your property in future
- Leave your property in a clean, safe and habitable state at the end of our treatment

Professional damp proofing

Damp problems vary in severity and it is often the case that damp proofing surveyors can simply offer some advice and guidance that will allow you to combat the problem yourself without any additional treatment necessary. On the other hand, damp can also create a variety of problems like staining and plaster damage and potentially develop into serious property problems.

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SERVE AND DELIVER



Hardware and supplies:

- 13 x 32mm fine-thread Kreg Pocket-Hole Screws
- 8 x #6 x 38mm flat-head wood screws
- 1 x 13mm x 915mm Aluminum Round Rod
- 1 x 10mm Cove Router Bit
- Epoxy



Wood products:

- 1 x 19mm x 38mm x 1800mm maple
- 1 x 19mm x 38mm x 1220mm cherry
- 1 x 19mm x 140mm x 1220mm cherry



Tools:

- Drill/driver
- Sander
- Kreg pocket-hole jig
- Tape measure
- Miter saw
- Combination square
- Router
- Hacksaw

This serving tray offers a unique style by incorporating two classic hardwoods - cherry and maple, although these can be swapped out for local woods - along with aluminum bar stock for the handles, and a subtle routed detail that you can add if desired. The tray is easy to build, though, using three boards, the aluminum bar, and some screws.

PARTS LIST

2	Bottom Rail	19mm x 38mm x 508mm maple
4	Handle Rail	19mm x 38mm x 127mm maple
2	Wing	19mm x 38mm x 508mm cherry
2	Centre Board	19mm x 140mm x 508mm cherry
2	Handle	3mm x 318mm aluminium Rod

Step-by-step guide

Step 1: Make the Bottom Rails

Start by cutting Two Bottom Rails to size from a 19mm x 38mm maple board, as shown in the cutting diagram. Set your Kreg Pocket-Hole Jig for 19mm-thick material, and then drill a pocket hole in each end at the locations shown. Notice that the pocket holes are off centre. That way, when the center panel gets attached, the holes will be covered up. Now you need to drill four holes, as shown, in line with

the pocket holes. These will be used to attach the outer parts of the tray, called Wings, later. Use a 3mm drill bit with a countersink, or follow up with a larger-diameter bit to countersink the holes, as shown.

Step 2: Make the Handle Rails

Cut two Handle Rails to length from a 19mm x 38mm maple board, as shown in the cutting diagram. One end of each Handle Rail is cut square, and the other at a 15° angle. After cutting the pieces, round over the square end of each rail, as shown. The roundover is fairly small, so you can do it with a sander pretty quickly. Don't drill the hole that will receive the Handle yet. It gets added after the Rails are assembled.

Step 3: Join the Rails

Lay the Bottom Rails with the pocket holes face up on a flat surface. Then position the first Handle Rail against a Bottom Rail, as shown. Note that the upper edge of the Handle Rail will sit flush with the upper edge of the Bottom Rail and there will be a slight overhang on the bottom. You can sand this flush later. Apply glue to the mating edge of Handle and Bottom Rails, and then attach the parts using 32mm fine-thread Kreg Pocket-Hole Screws. Repeat this for all four Handle Rails.

Step 4: Drill the Handle Holes

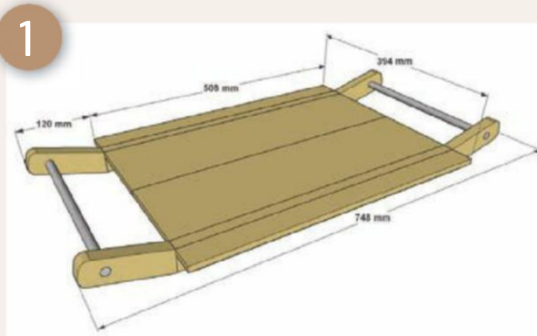
When the glue dries on the handle assemblies, sand them flat. This is also a good time to sand the Bottom Rail and Handle Rail connections so they are flush. Now you can drill holes for the aluminum handles. To assure that the holes align properly, tape the two rail assemblies tightly together, as shown. Mark the location of the Handle holes, and then lay the assemblies on a scrap piece of plywood or wider board to help prevent tearout as you drill through the pieces. Secure the Rails to the work surface with clamps, and drill each set of holes, making sure to keep the drill as perpendicular as possible.

Step 5: Make the Wings

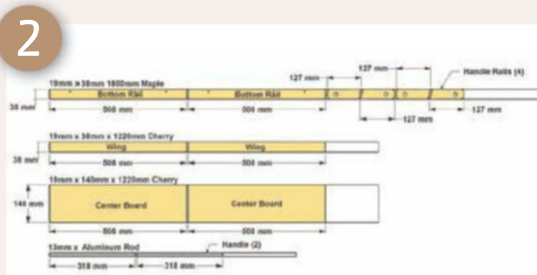
Cut two Wings to length from 19mm x 38mm cherry, as shown in the cutting diagram. If you want to add the cove detail shown, chuck a 10mm cove bit into your router, and then, rout a profile on one edge and both ends of each Wing as shown. If you don't have a router or don't want to add this detail, you can leave the edges square, or sand the edges of one face slightly to ease the sharp corner. Sand each Wing smooth.

Step 6: Attach the Wings to the Rails

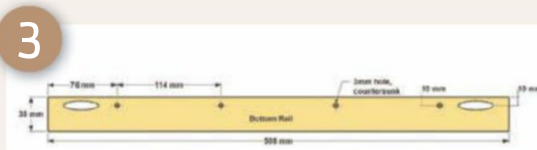
Apply glue along the flat edge of the Wing, and then align it with the rail assembly so the upper face of the Wing is flush with the upper edge of the Bottom Rail, as shown. Clamp the Wing in place. Then use the holes in the Bottom Rail as guides to drill pilot holes in the Wings, as shown. This will prevent the wood from splitting as you next drive in four #6 x 38mm flat-head wood screws to secure the Wing. Make sure that the screw heads are flush with or slightly



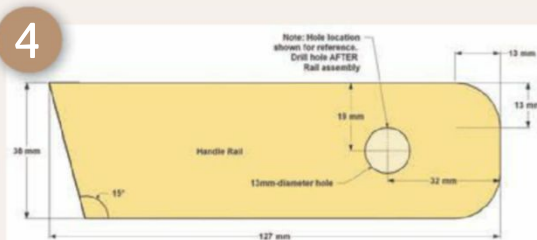
Dimensions of the project



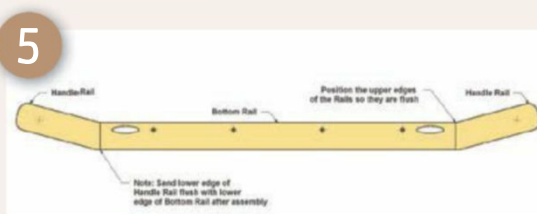
The cutting list



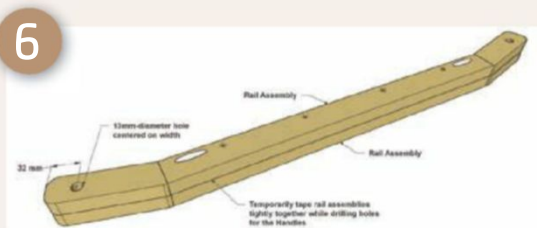
Make the Bottom Rails



Make the Handle Rails



Join the Rails



Drill the Handle Holes

below the surface of the Bottom Rail so they won't get in the way later. Repeat this to join the other Wing to the other rail assembly.

Step 7: Make the Centre Boards

Cut two Centre boards to length from 19mm x 140mm cherry, as shown in the cutting diagram. Drill pocket holes at the locations shown.

Step 8: Complete the Centre Panel

Apply glue the mating edges of the two Centre Boards, align the ends and edges, and then clamp them together. Secure the boards together using 32mm fine-thread Kreg Pocket-Hole Screws. After the glue dries, sand the surfaces flat. Using the same router set up as on the Wings, rout a cove profile on the ends of the panel (but not the edges) as shown.

Step 9: Make the Handles

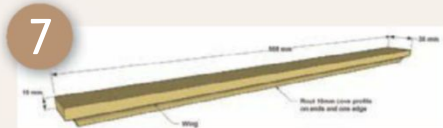
Using a hacksaw, cut two Handles to length from 13mm aluminium bar, as shown in the cutting diagram. Use a file or sandpaper to sand the cut ends smooth. Then use a woven abrasive pad (such as Scotch-Brite) to polish the aluminium to a consistent finish.

Step 10: Final assembly

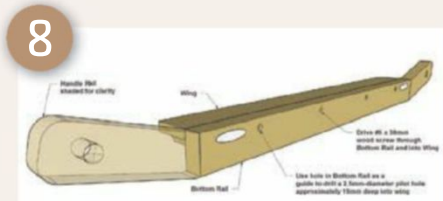
Spread glue along one edge of the center panel, and then position it against one Rail/Wing assembly, as shown, so that the upper face of the panel is flush with the upper edge of the Bottom Rail. Clamp the panel in place, and then secure it using glue and 32mm fine-thread Kreg Pocket-Hole Screws. Spread a small amount of epoxy in each handle hole, and then insert the handles into the holes. Make sure the handles are flush with the outside face of the rail assembly. Then attach the second Rail/Wing assembly in the same way.

Step 11: Finish it up

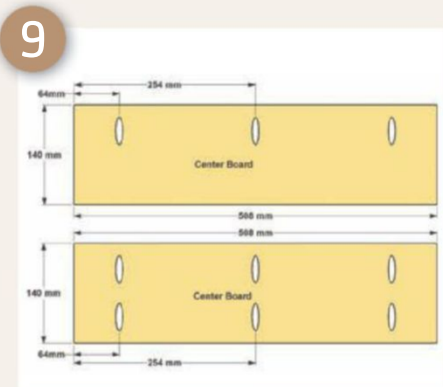
Once the glue dries, clean away any excess that has squeezed out. Then do any final sanding that's necessary. You'll especially want to make sure the centre panel is flush with the rails. Once that's done, you need to add a protective finish. If you intend to use the serving tray for food, you need to make sure the finish is food safe. Common finishes include salad bowl finish, boiled linseed oil, or another finish that's listed as "food safe." We applied a couple coats of Tried and True natural oil. It's safe, offers protection, and really brings out the beauty of the maple and cherry.



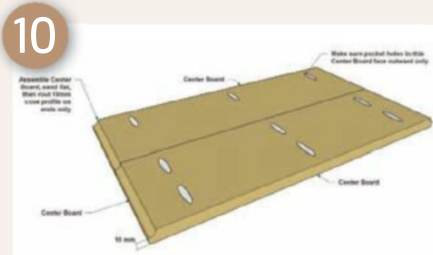
Make the Wings



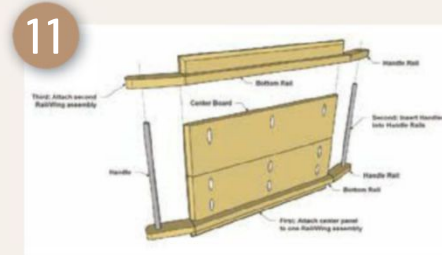
Attach the Wings to the Rails



Make the Centre Boards



Complete the Centre Panel



Final assembly



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For a high res version of the drawings and the cutting list of this project, email editorial@homehandyman.co.za

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PRACTICAL PLANTER

Make a DIY planter with hidden storage for a hose



Tools and materials

- Mitre saw
- Drill
- Forstner bit
- Heat torch
- Sander/sandpaper
- Thick bristle brush
- Paint brush
- Wood for the project
- Decking screws
- 2 x magnetic cabinet latch
- Outdoor timber oil
- Planter/plant

Warmer weather is almost here, which means it's time for outdoor projects! Since I'm a sucker for weekend projects and multi-purpose builds, I created a modern planter with hose storage for my parents' backyard.

Step-by-step guide

Step 1: Set your mitre saw to 5 degrees and begin cutting your wood. You will need the following pieces (each measurement is taken from the two longest edges of the cut):

- 4 x 460mm long planks
- 4 x 435mm long planks
- 4 x 155mm long planks
- 4 x 385mm long planks

Step 2: Next, set your mitre saw to 0 degrees and cut the following pieces for your frame – we used what is commonly referred to as 2 x 2's in America – essentially a 50mm x 50mm length of wood:

- 4 x 330mm tall supports
- 2 x 410mm wide shelf supports (you can cut more if you need the extra support)
- 2 x 100mm tall door supports

Step 3: Create two full faces by adding the four 330mm support pieces to the ends of the boards with decking screws and wood glue. Make sure the supports installed at the very edge of the boards (you'll be attaching other boards to them later).

Step 4: Begin adding the side pieces to one full face of the planter by attaching them to the support pieces with decking screws.

Step 5: Flip your piece over so that the side is laying flat on your workspace and then add your next full face to the side with your screws.

Step 6: Next, add your front pieces (but not all of them)! Just screw the top two pieces to your planter and keep the bottom two pieces open (we'll assemble these later).

Step 7: Add your shelf pieces to the inside of your planter. This is

where your potted plant will sit. The depth of the shelf will depend on how tall your potted plant is.

Step 8: Once your shelf pieces have been added, create your faux panel by attaching supports to the back with screws.

Step 9: Next, sand the piece down.

Step 10: Now comes the fun part! Use your torch with propane tank to begin torching your piece. Gently apply the heat to the cedar and move the torch side-to-side to create a charred

effect. Torching the wood will also help waterproof the piece as well as keep insects away.

Step 11: After torching the wood, use a brush to wipe away the charring and expose the gorgeous wood grain. You can continue these two steps until you are happy with the colour and the detail on the piece.

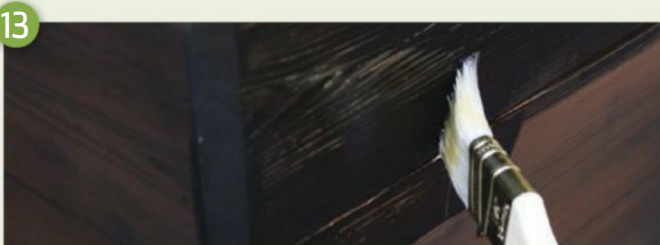
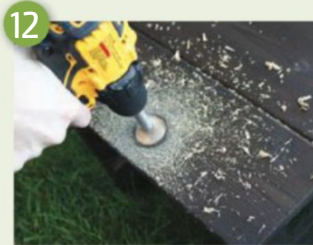
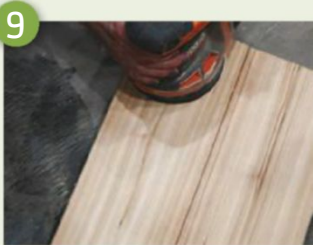
Step 12: Once the piece has been torched, use a forstner bit to drill a hole in the back of the planter for the hose to thread through. You will have to torch this section of the planter again to keep

the entire piece weather-proof.

Step 13: After torching the piece, give it an extra layer of protection with outdoor timber oil.

Step 14: Next, add two magnetic cabinet latches to the inside of the front supports and install the metal plate to the backside of the front panel. This will keep the panel in place when the hose is hidden!

Step 15: Last step is to store your hose! I placed mine up against the tap to hide the hose completely.



1. Cut your wood to length, 2. Then cut the supports as well 3. Create two full faces by adding the four 330mm support pieces to the ends of the boards, 4. Begin adding the side pieces to one full face of the planter, 5. Flip your piece over and then add your next full face to the side with your screws, 6. Add your shelf pieces to the inside of your planter, 7. The depth of the shelf will depend on how tall your potted plant is, 8. Create your faux panel by attaching supports to the back with screws, 9. Next, sand the piece down, 10. Use your torch with propane tank to begin torching your piece, 11. Use a brush to wipe away the charring and expose the wood grain, 12. Drill a hole in the back of the planter for the hose to thread through, 13. Give it an extra layer of protection with outdoor timber oil, 14. Add two magnetic cabinet latches to the inside of the front supports.



KNOW YOUR PLANER

If you enjoy working with wood, you're eventually going to come across a job that requires you to shape it by gradually taking a little bit off here and a little bit off there. In these instances, you're probably either rounding sharp corners or

flattening warped wood you want to use for boards. There are a lot of different tools (electrical and manual) for doing this sort of work. Knowing the strengths of each kind of tool will help you find the one best suited to your needs.

The 5 types of manual planers

There's no school like old school, and these tools are a throwback to a simpler time when people worked with their hands. An advantage of manual planers is that you can take your work nice and slow. These tools can deliver the best precision, making your end-product look like a true work of art.

Hand planer

This is a basic, no-nonsense planer. You can adjust the depth of its cut and use both hands to shape wood with strong, controlled planing.

Two-handed planer

A twist on the basic hand planer, this one puts handles on each side for a lighter, more controlled planing action. It's perfect for shaping corners with quick, delicate motions, but its blade is also adjustable in case you need to cut a little deeper.

Combination rasp planer

The action on this is less like a traditional planer and more like a cheese grater. It's also more versatile than a traditional wood planer, allowing the user to also shape and whittle down other materials like fiberglass and soft aluminium.

Flat plane bottom-edged wood hand planers

This planer requires one hand to use, so don't go this route if you have a lot of hard planing work to do. But it will allow you to shave off crating materials just a little at

a time. An upshot is that this model is easy to get under so that you can see what you're shaping while doing the work. It's also the cheapest planer we found.

Hand scraper

A traditional planer involves a pushing action, but this scraper, used to repair hardwood floors, uses a pulling action. It's similar to a planer in that it helps you even out rough spots on a surface. So, if a planer's pushing action isn't quite what you need, this is an option.



The 4 types of electric planers

One drawback to manual planers is that they work slowly. Sometimes so slowly that they wear out the user's body and that person starts making mistakes. An electric planer is a great alternative – it works quickly, and most are adjustable so that you get cuts to just the right depth.

Handheld planer

A spinning blade does the work of the static blade in the manual planer, with a contoured handle that allows the user to control it. The blade of the handheld electric planer works quickly, even if you set it for a shallow grind, so you'll want to keep an eye on it to prevent drifting.

Bench planer

It's called a bench planer because, while it's too big to hold in your hand, it's small enough to put on top of a workbench. It's the first electric planer big enough to start handling small pieces of wood, which also means that it's not well-suited to doing small, detailed work.

Molding planer

Designed for molding but capable of handling similarly sized pieces of wood for other projects, the molding planer sits on the floor of your workshop. This piece of equipment is designed primarily for professionals, or really serious amateurs.

Stationary planer

Serious jobs demand serious equipment, and the stationary planer is the most serious electric planer there is. It's expensive and designed for professionals with a lot of work and a big budget. Anything bigger, and you're talking about industrial grade.



The 4 types of thicknessers

Most people consider planers and thicknessers to be different because, while planers cut from the top, thicknessers cut from the bottom. Once you fully review everything, you might decide that you want that bottom-cutting action, so we'll go through some of the different styles. One word of caution: Use push blocks – pieces of wood to push your stock – for safety.

Closed stand

This thicknesser planes from below with a spinning blade. The difference between this one and the other primary kind of stand thicknesser is that the stand is enclosed. This makes it more stable while you scoop smaller pieces of wood, especially lumber. If you need extra length, it can be more easily attached to a longer bench.

Open stand

The open stand on this thicknesser makes it best for longer pieces of wood that might cause a closed stand to destabilise and possibly tip over. The angle of its legs, however, means that it's not as well-suited if you want to lengthen the bench by attaching it to a standalone table.

Benchtop thicknessers

The benchtop thicknesser is small enough that you can store it, and pull it out and put on a workbench when you need it. It's not very well-suited to big jobs. One thing you can do, however, is build a standalone table to accommodate bigger pieces of wood.

Electric hand thicknessers

The smallest of the thicknessers, the electric hand thicknesser is only suited to make planks for crafts like jewellery boxes. It's also small enough that push blocks might be overly burdensome, so you'll want to get a good pair of leather gloves for safety.



Make a sandbox with a lid and bench for the kids

THE SANDS OF TIME



Materials

- 4 wooden shelves
- Around 40 screws
- 8 hinges
- Wood glue
- Stain



Tools

- Clamps
- Saw
- Sander
- Mitre box

Playing with sand is not only fun for children of all ages, but it is also very educational. But our sandpit was also very messy with cats running around it. So, I searched for a good and handy lid but the size of my sandpit was not standard. So I decided to make my own based on a picture I found online!

>> Manon van der Sar

Here are some simple instructions on how to make your own lid, for the size that is most comfortable for you! We have now used this sandbox lid for five months and we are still having fun with it! (And the 4-year-old is able to open the lid herself. If you have a smaller sandbox, smaller kids can open the lid (depending on the weight of the wood).

OUR EXACT SHOPPING LIST

3 x (so 9 pieces): 76mm x 76mm hinges

48 x 16mm Torx screws

16 x 18mm x 144mm x 2100mm wood

1 x 27mm x 44mm x 2100mm wood

2 x 44mm x 69mm x 2100mm wood

Step-by-step guide

Step 1: Measure your sandbox (or define the size if you have to build a sandpit from scratch. If you do make your own sandpit, we dug a hole, placed stones at the side and tiles at the bottom and then filled it with sifted sand).

In our case, the sandbox was 1400 millimetres wide and long. The side of the box in our case is 50mm thick. These sizes are important for selecting the right wooden shelves.

The math: (width of the sandbox + thickness of the side) / 8 (if you want the same look, 4 is also possible) = maximum width of the shelves. We searched for a shelf that was 110mm smaller than that outcome, allowing a small space in between the shelves (also giving some room for error).

We also needed to clear the stones from sharp material.

Step 2: Put a beam in the ground on each corner of the box. (My 4-year-old daughter helped me saw the beams). Then measure the right size from one beam to another and add twice the thickness of the shelf (for you want the box to be built around the beams). It gives the best appearance if you mitre the plank. I used a jigsaw to do so.

Glue and screw the shelves in the right place. I used two screws per shelf per beam. Sand the box first as it is more difficult if done later in the process.

Step 3: Lay down all the shelves on the box. Define the amount of space between the

shelves. In our case, I used a wooden peg as a distance holder between the shelves, which worked very well. You need something as a distance holder to make sure that the shelves do not shift during gluing.

To make it a little easier for yourself, don't try to do a perfect fit on the sides of the box. Create a small overhang, so you create some margin for error, and in most cases 'equal is not equal'. Do not place the shelves right on the edge – this is easier to remedy at the end of the process! Now prepare the middle part of the sandbox; the piece where you will be sitting on.

Glue a piece of wood – I used left-overs from the second step (making the box) – on two shelves with the right amount of space in between. If you use only six shelves for your lid, this is not necessary. This gluing is needed because not all shelves are connected to a hinge.

Make sure this is glued well; use clamps to do so. You can also screw the piece to the shelves, but this is a potentially sharp part that kids can cut themselves on. I also choose to glue the pieces for aesthetic reasons. You need two of these middle parts prepared. (So, 2 x 2 shelves (= 4 shelves) with two pieces of wood each (4 in total).

Now also prepare the back of the bench. Again, glue pieces on two shelves with the right amount (as you choose) of space in between. Make sure this piece is longer than the height of the box + the width



1 Measure your sandbox (or define the size if you have to build a sandbox from scratch)



2 In our case, the sandbox was 1400 millimetres wide and long



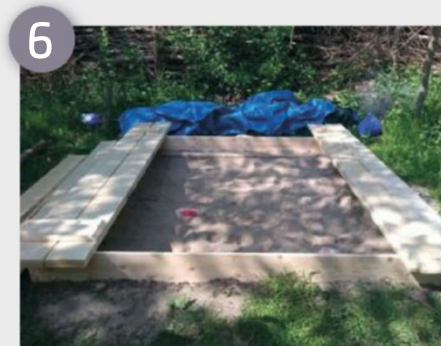
3 Saw the beams



4 Glue and screw the shelves in the right place



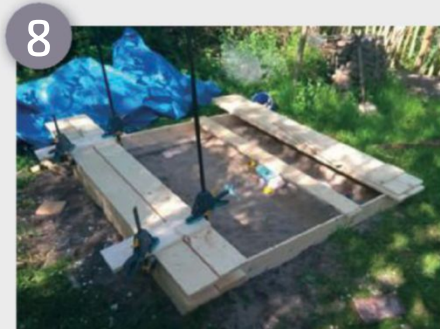
Lay down the shelves on the box



Another view of the box - the shelves will overhang slightly



Next define the amount of space between the shelves



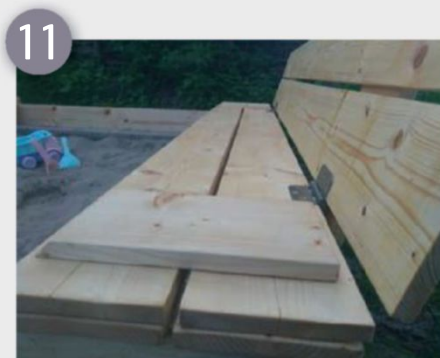
Clamping up



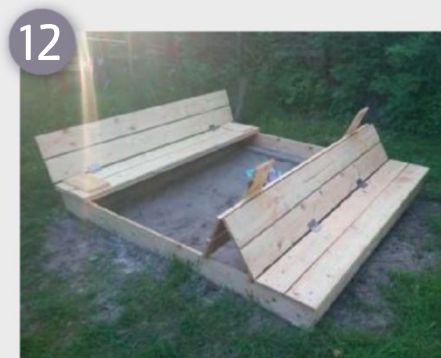
I used a wooden peg as distance holder between the shelves



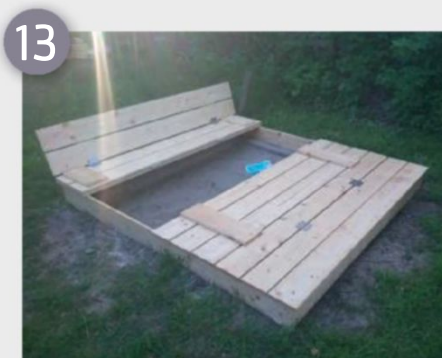
Create a small overhang, so you create some margin for error



Screw two shelves on the box at each side



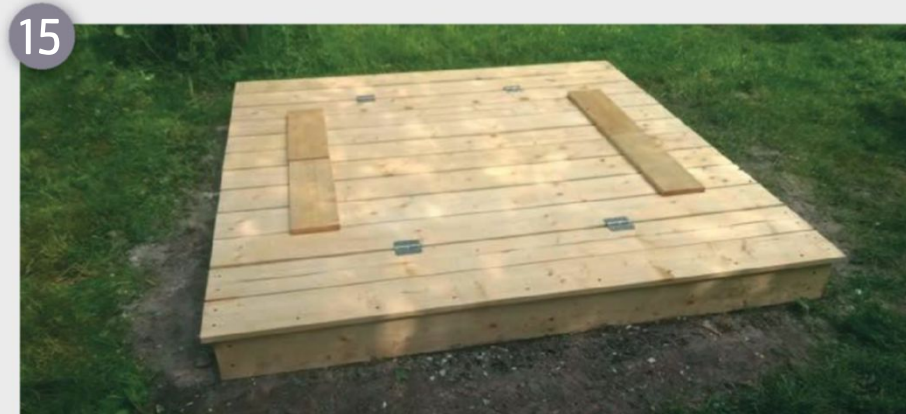
Showing how it opens and closes



One side open, one side closed



Close the lid and use a jigsaw with rails to cut the sides of the lid



Sand the lid and put a stain on

of the middle piece and add an extra 25mm. You can always make this part smaller at the end (but not longer...)

Step 4: Now lay down all pieces of the lid: 2 x middle pieces (with the glued part facing down), 2 x top of the benches, 2 x shelves at the back of the lid (left and right). Happy with how it looks? Great, you can continue! Too little space in the middle? Saw a piece of the top part, but do this from both sides! So, if you need 10mm more, remove 5mm from each side. Too much space in the middle? Make the overhang at the sides smaller. If this still does not work, make the top piece bigger, but do this at both sides.

If you are happy, screw two shelves on the box at each side. The shelf at the side can be screwed all the way (we used screw per 200mm) at the box and two at the side. The second shelf can only be screwed onto the side of the box. Make sure you drill a pilot hole first with a smaller bit than the screw to prevent the wood from cracking. Also, do this at the other side of the box. You now have four shelves screwed onto the lid (two on each side).

Now connect the top part to the middle part with hinges. I used two hinges per bench side (so four in total) Make sure you pay attention to the hinges working correctly and the amount of space in between. Also, look closely at the design of the bench on the pictures; the glued part from the middle part should be facing up and the big piece from the top part should be facing down (while putting on the hinges). If you are not sure about the location of the hinges, do a simple paper prototype to test it for yourself.

Now lay down the middle pieces (glued part facing down) with the top part connected to it and screw the hinges on. I used two hinges per part (so again four in total). Check if the hinges work correctly. Also, do this for the other side. You now have a working lid which probably looks ugly at the

sides. The next step is finishing up!

Step 5: You are almost done. Now close the lid and use a jigsaw with rails

to cut the sides of the lid nicely. Sand the lid and put a stain on it, so it can be used for years. Then call the kids and have fun!



One happy 'client'!

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Follow our step-by-step guide to bricklaying, from mixing mortar to getting a good-quality finish.

How to BUILD A BRICK WALL



Tools and materials:

- Brick trowel
- Old board
- Tape measure
- Spirit level
- Brick/string line
- Shovel
- Club hammer
- Bolster
- Stiff brush

Bricklaying is considered one of the more approachable construction skills, so many self builders want to give it a go. But it isn't a task to be taken on lightly, especially if you're building structural walls.

The easiest route to great results is enlisting a good brickie. Using an experienced tradesperson may be cost-effective, too, as it's likely to speed up the build and minimise mistakes.

Of course, if you do want to tackle an involved bricklaying project, it makes sense to practice. Even the most confident DIYer will need to get to grips with the process first.

Trying your hand at building a garden wall is a great place to start. You'll learn everything from setting out the footprint and maintaining level and square to mixing the mortar, bedding the bricks and finishing joints neatly.

Before you begin your project, you'll need to figure out the number of bricks required. Standard types are 215mm x 102.5mm x 65mm. To get an accurate picture of the number of bricks required, you'll also need to account for a 10mm mortar bed. So, to come up with the correct calculations, input your brick size as 225mm x 102.5mm x 75mm for standard products.

You'll then want to add an allowance for cuts and wastage. Typically, you

might overorder by 5% for a house or garage wall where there will be structural openings (such as windows). You might get away with less on a simple garden wall.

Step-by-step guide

Step 1: Start your brick wall at the corners

Firstly, lay out the bricks at both ends of your wall where the pillars will start. This should be done after any necessary foundations have been prepared. Using your string line, make a straight guideline at brick height between the two outside bricks.

Step 2: Mix the mortar

Following this, heap five shovels full of sand and one of cement on an old board. Turn shovel to mix

to a consistent colour. Form a central hollow, pour in water and mix. Repeat for a smooth, creamy texture that's wet but not too loose.

Step 3: Lay the first course of bedding mortar

Next you should lay a 1-2cm mortar bed along the string line. Starting at one end, lay the first brick and tap slightly to 'bed in'. 'Butter up' one end of the next brick with mortar and abut it to the first. Repeat using string line as a guide.

Step 4: Create the brick pillars

At the point where you want your pillars to start, place a brick side-on to the end of the wall. As you build up the wall, each consecutive course of pillar bricks must be laid in the opposite direction.

Step 5: Cutting bricks

When building pillars, at certain courses you'll need to lay half-bricks. To make a cut, place the brick on its side, locate the bolster at the split point and strike the head firmly with a club hammer. It should split cleanly first time.

Step 6: Keep the pillars one course ahead

Always build at least a course higher on the pillars than the rest of the wall. Move the string line up as you build, bedding it into the mortar on the pillars. For a stretcher bond, the end of each brick should be over the centre of the one beneath.

Step 7: Make sure you're sticking to 10mm mortar joints

Horizontal and vertical mortar joints should be 10mm thick. With standard bricks there should be 75mm from the top of each brick to the top of the one beneath. If your bricks soak up moisture fast, you may want to 'joint up' (step 10) as you go.

Step 8: Add a coping stone

You may want to add a coping stone to finish when you reach the top of the pillars. Alternatively, you could create a pleasant effect at less cost by bedding bricks into the mortar on their sides.

Step 9: Decorative brick soldier course

Adding a 'soldier course' is an attractive option to top the main part of a garden wall. Turn your bricks vertically lengthways and lay along the full length. Use a second, higher string line to keep a uniform finish.

Step 10: How to finish the mortar beds

To finish the beds, use the rounded edge of a brick jointer to scrape mortar into the joints. Start with the horizontal lines and follow with the vertical – it's easier to remove any excess mortar this way.

Step 11: Clean up

Lastly, give the finished wall a gentle brush over and clean up any mortar that has fallen onto the floor before it dries. You can use water to wash cement away from the floor, but be sure to keep it away from your newly-built wall!





Replacing your doors is an easy way to refresh the look of any room. Whether you're looking to change all your internal doors, or you just have a few that could do with an update, it's an easy task to complete that just needs patience, careful measuring and little know-how.

How to HANG A DOOR



What you will need

- Tape measure
- Pencil
- Wood plane
- Hard point hand saw
- Safety goggles
- Sandpaper
- 25mm Chisel
- Hammer or wooden mallet
- Drill
- 2mm and 3mm HSS drill bit
- Workbench
- Wooden wedges
- Penny coin
- Internal door
- 2-3 suitable door hinges
- Screws

As doors in many older houses aren't a standard size, you might need to trim a replacement door to fit the existing frame, or even have one specially made. However, you shouldn't cut more than 10mm off each side edge of a flush door (or 5mm off a panel door) or you could weaken the structure. Bear in mind that the old door frame may not be straight either, so you'll need to make allowances. Buy new hinges the same size as the existing ones or reuse the old hinges if they're in a good condition.

How to prepare for hanging a door

Before you start to fit a new door, leave it unwrapped in its intended room for a day or so to allow the wood to acclimatise. Wood can swell or shrink depending on the moisture level in the air, so this will allow the timber to settle, preventing the

need to more adjustments after fitting. If your door is panelled, make sure you fit it the right way up. If in doubt, refer back to the manufacturer or retailer's website to check the correct direction of the panels.

You should also consider which direction you want your door to open. Most doors open into a room, rather than out of a room – unless space is a real issue. You should also consider whether you want the door to open towards the corner wall of the room or against the main wall of the space. Make these decisions now as they will determine where you position the hinges on the door.

How to measure for a replacement door

If you have an existing door to replace, simply take note of its existing measurements, noting the width, height and thickness of the door. Choose a new

door that most closely matches these measurements, rounding up, not down. For example, if you measured 1978mm (high) x 757mm (wide) x 44mm (thick), rounded up, the nearest standard door size would be 1981mm x 762mm x 44mm.

If you have a frame but no door, measure the internal height and the width of the frame. The height is measured at two points (left and right) and the width is measured in three points (top, middle and bottom). Use the largest of both measurements to determine what size door is needed and round up the measurements to find the nearest standard door size.

Measuring the new door to size

If your old door was a good fit, use it as a guide for the new one. Lay the old door centrally on top of the new one and mark around it with pencil, so you can see where to you'll need to cut away any excess from the new door. If you don't have the old door to use as a template, use the frame to measure the fit of the new door. Use a pencil to mark the top of the frame height on the door edge.

Cutting the door to size

With the door securely held in place using a workbench, transfer this measurement to the bottom of the door and mark across. Using a saw and wearing goggles, cut the door to length. If you have to remove a lot of excess wood when cutting down the height of the door, cut from both the top and bottom of the door.

Be sure to measure equal amounts, so you keep the symmetry of the panels and use a plane for finer cutting. Next, check the hinge side of the door fits neatly to the frame and mark the door to the frame width. Use a plane to remove equal amounts from each side of the door until you reach the desired width. It should now fit neatly in the frame, but keep checking the fit until it's correct. Smooth any sharp edges with sandpaper.

Measuring the hinge positions

Once your door is trimmed to size, you need to measure where the hinges will

go. Hold the door up in the frame using wooden wedges and use a penny coin to make an equal gap around it. Mark the position of the existing hinge cut-out at both the top and the bottom of the door.

Fitting the hinges

Using these marks to position your hinges, draw around each one using a pencil. Measure the thickness of the metal hinge plate and mark a line on the face of the door to the same depth. Use a sharp 25mm chisel and mallet to cut around the pencil marks of the hinge recess. Then, holding the chisel at 45°, make a series of stepped cuts approximately 5mm apart, ensuring each cut is made to the depth you've marked for the hinge plate.

Take care when chiselling in the same direction as the grain so you don't split the wood. To prevent this from happening, make several smaller cuts, rather than just one main cut.

With the chisel flat side down, remove the wood from the new hinge recesses and put the hinges in position. Using the hinge as a guide, drill pilot holes for each screw in the hinge plate to prevent the wood from splitting. Use a screwdriver to fix the screws in place and tighten them up well.

Hanging the door on the frame

Position the door at 90° to the frame and place the wedges beneath the door. To begin with, only fix one screw into the bottom of each hinge. With the first screws in place, check the door opens and closes easily and smoothly, and doesn't stick or jam. Once you're happy with the fit, put the rest of the screws in.

Once the door is in place, double check that you are happy with how easily the door opens.

If the door isn't hanging correctly and is rubbing around the edges, try loosening the screws a smidgen, as the tightness will affect the movement of the door. If the door looks like it's spaced evenly in the frame, except in one area where it catches, you might need to remove the door and plane off a bit more wood to rectify the problem.

Common mistakes

When cutting a door to size, remember the old adage 'measure twice, cut once'. To avoid removing too much wood when cutting the door to size it's a good idea to test the fit of your door before you go too far. Before you test-fit your door, partially hammer four nails into the frame at the depth of the door to prevent it from falling through. Hold the door up when measuring it against the frame but remember the door needs to have a gap beneath it. Simply insert two wooden wedges or screwdrivers underneath to keep it in place. Make sure there is a 2mm gap around the top and sides of the door, a penny coin is a great way to judge this measurement.

Using the wrong hinges can make your door sit incorrectly in the frame, causing it to drag or jar. When fitting hinges to the door, use one of the new or existing hinges to mark where the screws are going to go. Hold the hinge in the correct place and mark with a pencil where the centre of the screw holes are. Then simply drill a shallow hole using a drill bit that's a little smaller than the diameter of the screw.

If you're using new hinges that are larger than the original ones, you may also need to enlarge the hinge recess in the frame. Hold the new hinge up to the frame, overlapping the recess, and draw around the new hinge end where the excess needs removing, then remove this excess wood using a chisel and mallet.



Learn how to make a low-cost welding table.

(UN)HEAVY METAL



Dimensions

- The tabletop is 1470mm x 800mm with 70mm x 30mm x 2mm rectangular tubing
- For the legs I used 60mm x 2mm square tubing
- The castors are 100mm with wheel locks
- The height is adjustable from 90cm to 105cm

For this project you will need 15 pieces of 70mm x 30mm x 2mm rectangular tubing and two pieces of 1470mm of 60mm x 60mm square tubing. Clamps will also come in very handy.

Weld the 15 pieces every 3cm at the middle with spots. For the legs you will need four pieces of 600mm 60mm x 60mm and four pieces of 500mm 60mm x 30mm or 60mm x 60mm. Make sure that everything is square and weld it together.

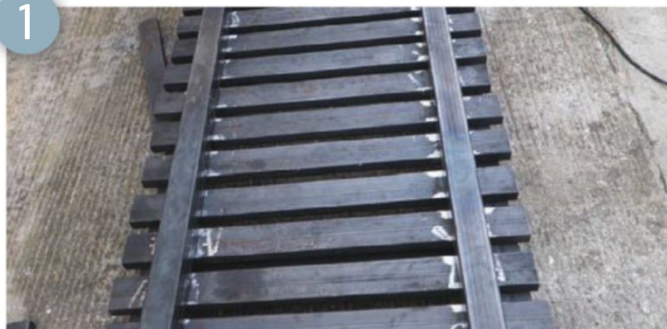
For the castors, weld one piece of 60mm x 60mm x 5mm plate for each leg and drill a hole in the centre for a M20 thread rod. Next weld a M20 nut.

For the next step, weld a nut to the plate of the castors and then weld the all-thread to the nut. Next you have to place the castors on the plate. In my case, the castor is 100mm.

For paint you need to cover the working surface and paint it with primer first and the colour of your choice.

Your welding table is now complete and ready to use!

1

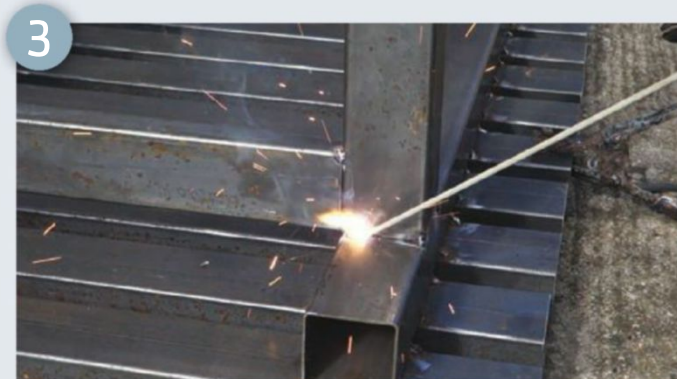


Here you will need 15 pieces of 70mm x 30mm x 2mm rectangular tubing and two pieces of 1470mm of 60mm x 60mm square tubing

2



For the legs you will need four pieces of 600mm 60mm x 60mm and four pieces of 500mm 60mm x 30mm or 60mm x 60mm



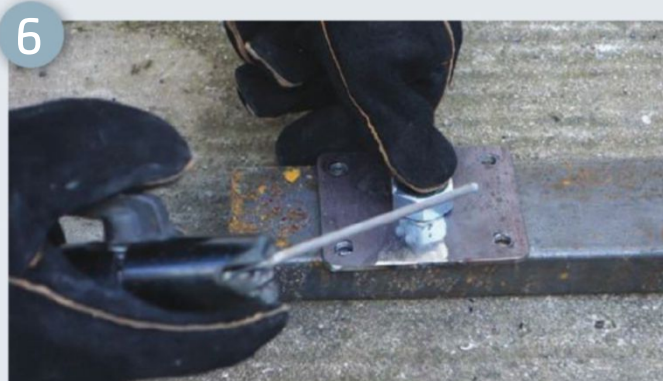
Make sure that everything is square and weld it together



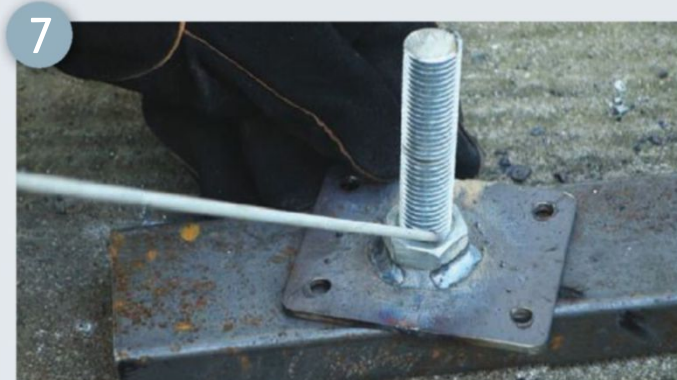
Weld a plate for each leg



Drill a hole in the centre for a M20 thread rod



Next weld a M20 nut



For the next step, weld a nut to the plate of the castors



Place the castors on the plate



For paint you need to cover the working surface and paint it with primer



Finish off with the colour of your choice

With winter in full swing, we need to embrace it with open arms! We've provided a few practical ways you can adjust your home for winter and save money in the long run.

HOW TO WINTERPROOF YOUR HOME AND SAVE MONEY

Shorter days and longer nights, chilly mornings and evenings - these are the signs that winter is here to stay. No matter where in the country you live, whether you will be facing days of rain or dry icy spells, now's the time to assess

your home to make sure that you've done everything you can to minimise the effects that seasonal change could have on your property. Make a few smart adjustments now and you'll retain the value of your home and save yourself money in the long run.

Home checks

- As soon as temperatures drop, there is the possibility that water in the water pipes can freeze. Check that your water pipes and geyser have been insulated with special insulation material as it can help save on your monthly electric bill.
- Your roof goes through a lot in a year, especially due to varying temperatures causing it to expand and contract. If you have a metal panel roof, consider getting an insulation product.
- Keep gutters clear of debris so they can effectively remove water from the roof.
- Before lighting that first cosy winter fire, have chimneys and furnaces maintained to ensure they are free of debris.
- Check for weak, low-hanging branches. Gale force winds can cause these to break, which could cause damage to your building's exterior.
- Strong winds from a winter storm can rip off loose tiles, so be sure all roof tiles are securely fastened.
- Be pool smart: Use a pool cover to limit water loss and keep filtering to once every 24 hours during winter. This could greatly save on the energy necessary to run your pool pump.

Electrical checks

- Because we tend to use more electric appliances, residential fires increase in winter. It is therefore important to protect your family by getting a fire extinguisher for your home, if you don't already have one.
- Winter's most popular electrical appliances - heaters, electric blankets, etc - are notorious electrical fire hazards so replace worn plugs and cords, and take heed if a fuse or circuit trips continuously.
- Check that all your appliances are switched off when you leave your house.
- Avoid overloading power points or altering the structure of the plugs on existing appliances to make them fit.
- Fuses may be easy to replace but if a fuse blows or the circuit trips repeatedly, the cause may need to be investigated.
- Make sure heating appliances are at least a metre away from combustible materials such as curtains or plastic containers and nominate someone to check it is switched off at the end of the day.



Keeping warm

- If you have a fireplace, use it. Cut down your electricity bill by using your fireplace. If you feel as though lighting up a fire is too time consuming, consider getting it permanently sealed to prevent cold air from flowing through the opening.
- If you are using space heaters, remember to close doors, windows, curtains and blinds to retain as much heat as possible.
- Seal gaps around windows and draught-proof wall cavities throughout your home in preparation for winter. You could also use a rolled up towel or a door snake to prevent cold air from seeping in, or add curtains and blinds with block-out fabric to bare windows.
- If you have ceiling fans, put them on a low-speed clockwise rotation to drive warm air from the ceiling back to you. Remember: warm air rises!
- Keep the curtains of your south-facing windows open during the day to let as much of the sun's heat in as possible.

By giving your home a good once-over now, you'll suffer less from the effects of freezing temperatures, flooding, gale force winds and more during winter.



Quick winter fixes

Here are four ways to winterproof your home this fall so your home is ready for the cold temperatures and whatever else the season wants to throw at it:

1. Store patio furniture

Winter isn't always the time for braais and dining alfresco, so it's important that you protect your braai and patio furniture in the winter months – that way, they'll be ready to roll when the weather starts to warm.

Take your patio furniture and braai and put them into storage. If you don't have a place to store your braai and furniture (or if your furniture is made of a more durable material), you should at the very least cover it up to protect it from the elements.

2. Empty and store hoses

You'll also want to store your garden hoses before the temperature drops. If you leave your hoses as is, the water in them can freeze, which can cause holes and leaks. Drain each of your garden hoses and store them inside until the spring.

3. Protect your home from chilly winter air

One of the trademarks of winter is cold air, and if that cold air finds a way into your house, you're likely to find yourself shivering no matter how high you turn up the heat.

It's important to seal off your house to keep cold air from getting in. Look for any gaps in the walls or foundation and seal them with foam or silicone (you can also use silicone to seal any gaps around windows). If your home is notorious for being cold in the winter, you'll also want to check the insulation.

4. Switch to winter fabrics

When the winter chill kicks in, you're going to want lots of warm, cosy fabrics to keep you warm. Replace your summer linens with more substantial fabrics, like velvet, fleece, or faux fur, to match the season. Put a throw or blanket in one of these fabrics in each room so you always have something on hand to wrap yourself up with when the temperature drops.

5. Invest in insulation

Did you know that heating and cooling accounts for up to 44% of the energy used in an average home? However, by insulating your home, you can save energy usage and reduce your electricity bill. Basically, insulation works by preventing warm air from moving towards colder areas. This means that, if you have effective insulation in your home, your home will stay cooler in summer and warmer in winter. There are various types of insulation you can install in your home, including insulation in the attic, air ducts, ceiling, walls and foundation.

Your painting questions answered



The most common painting questions answered all in one place.



Choosing your paint colours is the first step in a painting project

Although painting is one of the most common tasks undertaken around the home by DIY'ers, there are still several common misconceptions and myths. With that in mind, The Home Handyman compiled a list of the most frequently asked questions from our readers to provide a comprehensive list of answers for anyone who is embarking on a painting project, whether it be big or small.

PAINT AND TOOL SELECTION

Should a good quality brush last forever?

While the higher quality brushes provide a better finish and would last a long time when used by the infrequent painter, bristles can wear, especially when used to coat rough surfaces. For example, if you're applying a solvent-based stain with a natural china bristle brush over rough sawn wood, you may wear out one or more brushes if coating many square metres. However, the ability of the brush to load and release product still makes it well worth the expense. This being said, if coating over a smooth surfaces, the brush can last through many projects.

PAINT AND TOOL SELECTION *contd.*

I have a long hallway that needs to be painted. I am worried about coating with a high-gloss paint because this may show some of the imperfections. What do you recommend?

Some will use a medium sheen. These will offer improved washability as compared to a flat finish while not developing as high a sheen as semi-gloss products. Another option, if you prefer a low or flat finish a semi-gloss.

What can I use to paint ceramic tile floors?

Conventional floor coatings will not acquire sufficient adhesion to a ceramic tile floor. A professional contractor could be called in to completely scarify the surface. Once the ceramic finish is completely removed, it may be possible to treat the surface as a masonry or concrete surface.

Why should I buy a high-quality brush?

A good quality brush is well constructed, offers better quality (and, often, a greater number of) bristles, holds and releases paint better and minimises brush marks. Be sure to clean the brush thoroughly with the appropriate cleaner. From time to time, a solvent brush cleaner can be used to maintain the bristles.

If I miscalculate and need to buy more paint later, will the colour match exactly?

While every effort is made to ensure uniformity of colour, the fact remains that paint products, tint products, and even tinting equipment, all operate within specified tolerance levels. This means that there is a possibility that cans of paint bought at different times may not match exactly. If and/or when you realise that you will not have enough paint to complete a full coat over the entire space, we recommend that you stop at a natural break, such as a corner, window or door opening. Then go purchase additional product. If you're painting the final coat and you anticipate that you may need to touch up some of the areas already coated, take some product from the original material and set it aside (be sure to label it so that you can identify which areas it was used on). Take the remainder of the original paint and mix it with the new product before continuing.

Is there a special paint for bathrooms?

Yes, a number of brands offer paint which is specially formulated to provide a mildew resistant finish in humid environments such as bathrooms. These tough durable finishes are suitable for use on interior walls, ceilings, and trim. Common household stains may be removed with nonabrasive cleaners. When applied according to label directions these products will resist mildew growth and will remain washable.

PAINT APPLICATION

What is the optimal temperature to paint outside?

Until a few years ago, painting needed to be done when temperatures were going to be above 10° C. However, with advances made in waterborne technologies, products can be applied when temperatures are as low as 1° C. Note that surface, air and product temperatures must be at or above 1° C and that environmental conditions during and after painting need to be considered. Stable conditions and temperatures above 1° C are needed early in the paint's drying schedule. The first 48 hours could be critical to successful drying.

I have a less-than-perfect wall and want to hide the imperfections without having to apply textured paint. Do you have any suggestions?

If the imperfections are not too pronounced, sponge painting with multiple colours can hide a multitude of 'sins.' The greater the contrast among the colours used in the sponge painting process, the more the overall effect will hide imperfections.

Are there any issues associated with painting over a textured surface?

A common problem with existing textured paint is that it can be water-soluble. If you use a water-based product directly over such a surface, it may cause the existing texture to begin to soften and fall off of the surface. Test a fast-drying oil-based primer on the surface. Oil-based has the best chance of not wetting the textured paint. If the oil-based primer does not prevent the softening of the texture, then you may have to consider complete removal of the existing texture and reapplication of a new coat. Application of a fresh coat by roller may be easiest for most, however, in some cases it may not be possible to roll over texture paint as this, too, could cause it to come off. In such cases, application via airless spray may need to be considered. Test the application method over a small area prior to painting the entire ceiling.

What should I use to paint my garage floor?

If this is a concrete slab, check to ensure that the surface does not have a moisture problem prior to considering an opaque coating. Tape a small square plastic sheet to the floor (use duct tape and tape around the entire perimeter of the plastic sheet). Leave in place on the floor for one or two days. Then, check to see if moisture is present between the floor and the plastic. If moisture is present, painting should not be attempted. If the area is still dry, then the surface can be painted. Clean the surface to remove all contaminants.

When painting, let your creativity shine through

PAINT APPLICATION *contd.*

When painting a room, in which order should I paint the walls, ceilings, and skirting?

As you can imagine, this can be open to debate. For the most part, however, the ceiling and walls are primed prior to installing the skirting. Naturally, the ceilings are done first, and then the wall. Once the skirting is installed and the edges siliconed, the skirting is primed and finish coated. The skirting is therefore coated last. Even when repainting a similar order is followed. Ceiling first, walls second, skirting last. If the skirting was painted first, splatter from the roller could end up on the freshly painted skirting. Since time is of the essence in repaint work, there is not usually enough time between painting the skirting and painting the wall to use masking tape on the freshly applied paint.

When should I use a synthetic brush?

Nylon, polyester and nylon/polyester blended brushes are the applicator of choice when working with waterborne materials. These products will pick up and release water-based coatings better than natural bristle brushes. The filaments will not absorb water and become damaged from use with such products. You will find a wide range in pricing, and the higher quality brushes are typically well worth the higher price. These will often have differently shaped bristles. In addition, the bristles will be laser split to improve the overall release of a paint film. In addition, some are chemically treated to facilitate clean up after painting.



With most DIY painting projects, knowing a few additional painting techniques can lead to the most satisfying results

MAINTENANCE

Can mildew be permanently avoided?

No. Mildew can grow in any area that is dark and moist with limited air movement. Paints can be formulated to inhibit mildew growth, but, under some conditions, mildew will eventually reappear on any type of paint. A cleaning or maintenance schedule is the best protection in such environments.

What can I use to clean a surface that has already been painted?

Maintenance cleaning is vital to the overall service life of a painted surface. However, when selecting a cleaner, be sure to use a non-abrasive cleaner. If cleaning a water-based paint, avoid products that are ammoniated. Mild, soapy water will generally suffice. However, always test the cleaning solution in an inconspicuous area to ensure that it does not damage the paint film.

What is the best way to touch-up or repair a wall?

Touching up an existing painted surface can be challenging – professional painters wrestle with this constantly. Ideally, use paint from the same can that was used originally, but reduce it about 10% to 15% with the reducer recommended on the can. If you are touching up walls on which the paint was applied with a roller, use a small trim roller. If the paint was brushed on, use a brush. Apply a small amount of the touch-up paint and ‘feather’ the edges, starting at the outside edge of the touch-up area into the centre of the area. ‘Feathering’ entails drawing the brush across the area outside of the touch-up onto the new paint to create a transition that diminishes the appearance of the touch-up. If the surface had to be patched, use a primer sealer. Try to prime and paint to a natural break. Note that sometimes repaired areas may be noticeable. In this event, painting the entire wall may be the best option.

How can I clean a surface with mildew in preparation for a fresh paint job?

There are various cleaners on the market that are specifically designed for the removal of mildew. Many of these work quite well, however, a bleach and water solution will also work. Wash mildewed areas with a solution of one part household bleach and three parts water. This will destroy mildew and bleach stains caused by mildew growth. Apply the solution by brush or a garden sprayer apparatus. Heavy mildew may require additional applications, and scrubbing may be required. Flush area with clean water (before the solution dries) to remove bleach solution. Allow the surface to dry thoroughly. Be sure to use protective clothing and goggles to avoid contact with



MAINTENANCE *contd.*

the solution. Do not mix bleach with other chemicals. Note that these steps address the mildew problem only. Any other contaminants may require cleaning by other means.

What can I use to clean an exterior surface prior to painting?

In general, a detergent cleaner can be used. Be sure to wear all recommended safety equipment when working with these cleaners. Do not mix any other chemicals with these cleaners. Note that some of these products could affect the overall finish on the existing surface and should only be used if you are planning to repaint the surface.

How do I wash my freshly painted wall?

To assure maximum washability and durability, wait at least two weeks before washing the dry paint film. Avoid any abrasive or harsh chemical cleaners as these could damage the paint film. Read all package directions before using. It is always recommended to test any cleaner on a small, inconspicuous area prior to use. Mix or dilute the cleaner per package instructions. Solution strength may be adjusted depending on amount and type of contaminant. Remove any heavy debris and contaminants. Using a sponge or cloth, wash surface dirt and marks. Do not allow the cleaner to dry on the surface. Always clean from the bottom of a wall to the top. Rinse the surface thoroughly.

9 interior painting tips for the DIY painter

Many homeowners possess basic painting preparation. They know that it's important to use drop cloths, painters tape and stir paint thoroughly. But did you know that a golf ball can help maintain paint quality, or that microwaving paint tape can make it more manageable?

With most DIY painting projects, knowing a few additional painting techniques can lead to the most satisfying results. Storing paint properly and using the right tools can ensure that you prevent blemishes and cover surfaces evenly.

These nine DIY painting tips can help you improve the quality of your work and save time and money in the process, whether you're preparing to sell, changing your decor or doing some routine home maintenance.

1. Don't let your paint dry out

A half-empty can of paint will dry out. Drop golf balls into the paint can to fill the air space, or place plastic wrap under the lid, seal it tightly and store the paint upside down.

2. Use the right primer

If you're painting a new wall, use a water-based primer to hide imperfections and provide an even base before applying colour. If you're painting panelling, water-damaged or smoke-saturated walls, opt for an oil-based primer.

3. Avoid lap marks

To avoid stripes caused by rolling over paint that's already starting to dry, keep a wet edge by painting the full height of the wall and then moving over slightly so you can overlap the last stroke with the next.

4. Stir paint with a modified stirrer

Before you stir paint, drill holes in the stirrer to help mix the paint more thoroughly. The holes help the paint flow through the stirrer, aerating it like a whisk and mixing the paint evenly.

5. Add texture, if you want

If you want more texture on your wall, choose a roller with a longer nap which holds more paint. The nap is the fabric material covering the roller, and longer naps create more stippling on your wall because of the way their fibres distribute the paint. Use a shorter-nap roller for the smoothest finish.

6. Don't wash your brushes or rollers

If you're using water-based paint, there's no reason to clean your brushes or rollers if you don't finish your project in one day. Because cold temperatures keep water-based paint from drying quickly, you can simply wrap your rollers or brushes in plastic bags or tin foil and put them in the refrigerator. (Be sure to let them fully warm back up before using them).

7. Deal with problem tape

If you're using older tape, sometimes it can be difficult to peel off its roll without tearing or sticking. If your painter's tape continues to peel, microwave the whole roll for 10 seconds.

8. Determine the kind of paint on existing walls

Not sure if a wall's existing paint is oil or water-based? Soak a cotton ball in rubbing alcohol and rub it in a small area across the wall. If the cotton ball has paint residue, the paint is water-based. No paint on the cotton ball? You'll be painting over an oil-based paint and will want to use an oil-based primer before painting.

9. Invest in a paint pen

Buy a paint pen that lets you load it with a small bit of your new paint colour for small touch-ups later. These pens keep the paint inside fresh for about a year once filled; just remember to shake them well before use to ensure the paint comes out smoothly and evenly.

Some seasons in the year are ideal for getting rid of pests most effectively. Find out what time of year to address pests in South Africa and why.

WHEN IS THE BEST TIME FOR PEST CONTROL?

Spring is perhaps the most important time of the year to tackle bugs. One reason is that they are most vulnerable in spring, which makes it easy to control pests. In Winter, many insects hibernate, while they breed in the summer months.

Preventing pest invasions at the right time of the year in South Africa could be beneficial. Homeowners who control pests regularly usually won't see infestations. There are many benefits to controlling insects not only during the spring, but throughout the year.

Do bugs hibernate in winter?

Bugs that hibernate in winter can be hard to get rid of during the cold months of the year. It's a good idea to find out what bugs typically infest homes and buildings in your area and whether they hibernate.

1. Insects can survive frigid temperatures, but they survive best when the weather is stable.
2. Most insects get shelter and food throughout the winter months in a wide range of micro-habitats.
3. Bugs who stay in colder climates stay hidden in the landscape during winter. They do this in various stages of their life cycles.
4. Some bugs adapt to cold weather by dying off. It is the larvae that survive during the cold weather.
5. Other insects enter a hibernation-like stage.





Should I only use pest control in spring and summer?

Household pests can become a problem any time of year, but seasonal pest control in South Africa is advisable. This should never be a once-off service. The reason for this is that creepy crawlies have a habit of coming back repeatedly.

A single pest control service and contact killing rarely gets rid of your insect problem permanently. Many pests do not go dormant during colder weather. You can have a pest issue any time of the year.

Although the prime seasons for pests are the warmer months of spring and summer, you can have pest issues anytime during the year. Pests are more likely to seek shelter, food, and warmth by moving indoors during winter, when it is cold, or during summer, when it is hot and dry or when rains force them to seek dry shelter.

Regular inspections might be necessary to detect infestations. A great way of tackling possible pest issues in your home or building is to request a pest inspection at the turn of each season. This means your home will get professional eyes on it at least four times a year. If any seasonal pest issues crop up, the experts will spot the signs and help you get rid of the creepy crawlies.

3 Clever ways to keep bugs outside your home

1. Sanitation is key when controlling pests. Wiping down countertops, sweeping floors, and keeping food covered discourages bugs. By cleaning well, you can remove food sources that lure insects into your home.
2. Exclusion is the best way to control rats and mice. Sealing all openings, holes, and cracks will discourage rodents from getting into your home.
3. Once cockroaches get into your home, it is difficult to get rid of them. They are tenacious once you discover a pest infestation. Calling in professional pest control services the minute you suspect you have an infestation is important.

Annoying pests and the seasons they are most active in South Africa

Using DIY methods to get rid of pests is not always successful. Even though there is an increase in pest activity in Spring, you could still find these bugs in your home during other seasons.

Look out for flying ants during the winter months:

Flying ants are a common sight during the rainy summer season. If you have flying ants in your home during the winter months, heed the warning signs. The chances are that carpenter ants are nesting in your home.

Rodents can be a problem throughout the year: Rodents are disease carriers. Finding mice and rats inside your home or yard is concerning. They cause structural damage to homes and buildings.

They can damage anything from electrical wiring to furniture and clothing. The main reason for this is that their teeth never stop growing. To keep their incisors sharp, they continuously gnaw.

Rodent teeth can gnaw through hard substances. Rats and mice spread diseases through their droppings, saliva, and urine. These destructive pests are common pests found in the home at all times of the year and in every season.

Are bed bugs a problem in your home? You will soon recognise the signs by the welts on your skin. Bed bug bites can be nasty. These hardy creatures are hard to eliminate.

The minute you suspect you have an invasion of bed bugs, contact the professionals. Bed bugs love warmer weather. They will multiply at an alarming rate during the warmer spring and summer months.

They have a distinct odour. They also leave visible blood spots on bedding. Call professional pest control experts to help you with these common pests.

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



Make a pallet coffee table with a secret compartment and invisible wheels.



RECLAIMED AND REIMAGINED

>> Erik Egenreider



What you will need

- A number of planks from pallets, or wood from your store if you prefer
- Nails and a hammer
- Screws and a screwdriver
- Saw
- Wood glue
- F-Clamps (to glue the planks together)
- 2 long 'piano' hinges
- 2 Magnetic cabinet door catches
- 4 wheels
- Wood filler
- Sander machine
- Wood finish

I made this coffee table entirely from wood I got from various reclaimed pallets I dismantled. It features:

- Two hidden compartments for TV remotes, video games controllers, coasters, candles or anything you may need on a coffee table.
- Invisible wheels, so you can take the table anywhere in the living room with no effort while keeping a minimalist style.

The dimensions are: Length: 123cm; width: 70cm; and height: 45cm.

CUT LIST AND MATERIALS

If you plan on buying the wood, see approximate dimensions:

- 14 planks of 1200mm x 95mm x 20mm (tabletop: 7 planks on each side). Two of those sawed at a 20 degrees angle on one side
- 2 planks of 965mm x 135mm x 20mm (the two doors)
- 8 planks of 440mm x 130mm x 20mm sawed with a 45 degrees angle on one side (legs)
- 2 planks of 440mm x 120mm (sides of the tabletop)
- 4 pieces of 260mm x 100mm x 100mm (legs)
- 3 pieces of 660mm x 80mm x 50mm (tabletop structure)

Using three boards for the structure (one in the middle, and one on each side), nail as many boards as needed on both sides to obtain the result shown in the pictures. Nail on both left and right boards, as well as in the middle.

Notes:

- Try to tighten those planks as best as you can before you start nailing, so no space is left between the planks. It'll avoid you using too much wood filler to correct those gaps at the end.
- Align the top and bottom planks well on each of the extremities. Especially when using pallet wood, not all planks are of the exact same size so you may need to adjust. If there are some gaps in the bottom part of the tabletop, it's okay.

The legs are composed of:

- Two planks of the same length, sawed at 45 degrees on one side so they assemble well. The 45 degrees saw is not mandatory, but I like the end result.
- One board on which the wheel will be screwed, so it must be large enough so the wheel can rotate without touching the planks on the side. In my case it was too small so I had to glue additional planks on the sides to make it larger (see the picture). In order to make the wheel invisible, you have to saw the board to the right length so that the wheel is just barely uncovered by the planks.
- One rotating wheel.

Nail the two planks to the sides of the tabletop, carefully aligning them so they assemble and leave no gap.

Place the board inside, make sure it's well in contact with the bottom of the tabletop, and glue it/nail it to the planks. Make sure it's well tightened when you glue, using F-clamps. Screw the wheel to the board and repeat the operation for the three remaining legs.

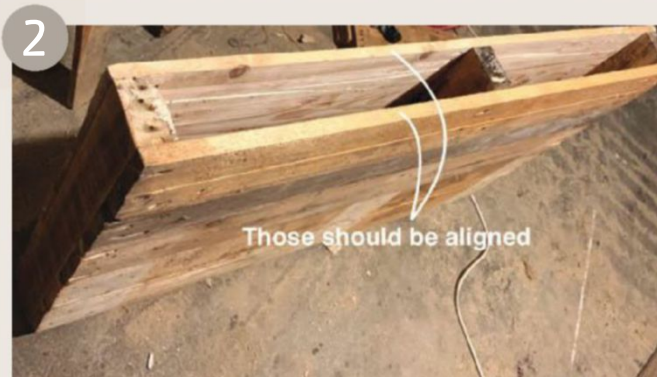
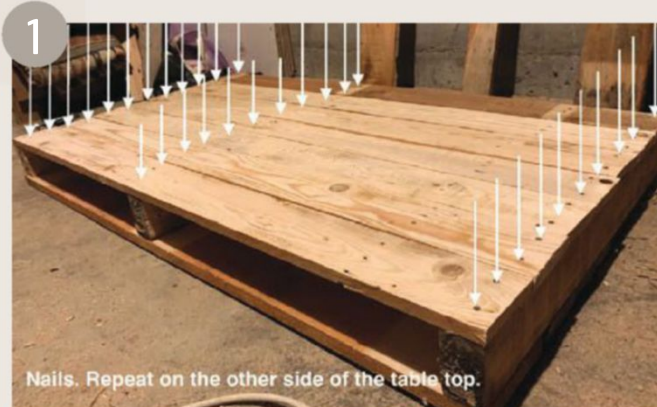
The secret compartment

The angle for the hinge: Before screwing the hinge, you'll need to saw the bottom plank of the tabletop to about a 20 degrees angle (does not have to be precise) to avoid leaving a gap when the hinge is closed, since it's never really 0 degrees. See the explanation for this on the pictures.

The door: The plank for the door should be aligned with the tabletop and cover at least 20mm more than the width of the tabletop, so it can hold horizontally when the door is open.

The magnet: Screw the magnet inside the tabletop. If the alignment is right, you should need only one magnet in the middle. If the door leaves a gap on one side, sand off some width on the other side until the door closed on the whole length. Note: As you can see on the pictures, I had initially placed several non-powerful magnets, but I realised that if I used more powerful magnets (up to 20 kilograms), I would need only one.

Screw the corresponding metal piece on the door so they connect well when closing the compartment. Repeat the same process for the door on the other side.



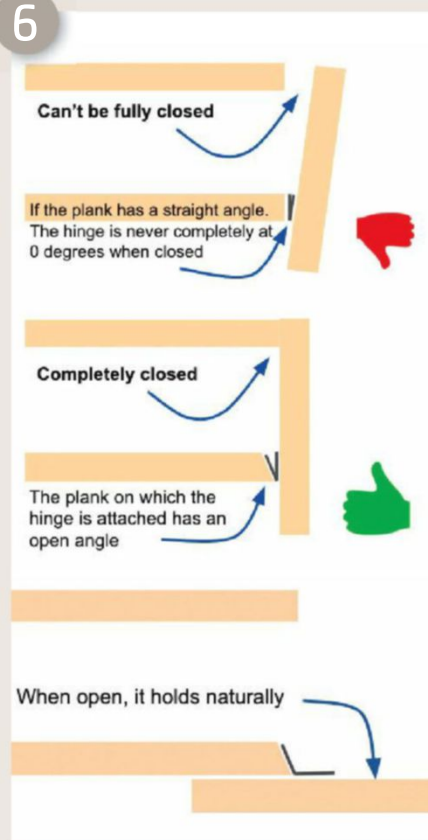
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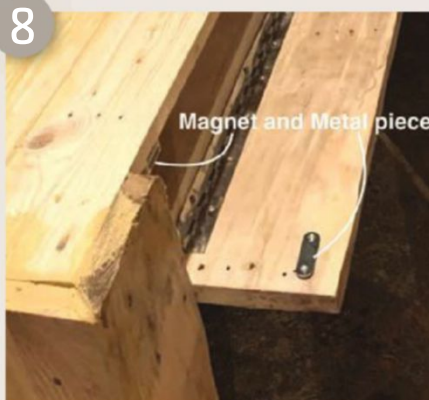
6



7



8



9



10



11



Adding side planks

Nail two planks: one on each side of the table, between the legs. Make sure that they are on the same level as the tabletop, to obtain a flat surface. They should also be large enough to cover the width of the tabletop entirely.

Now you already have a decent table, but it will look so much better once all those little gaps in the wood are filled, the table is well sanded, and you apply a nice wood finish to it.

Start with a 40 grit everywhere, sanding off sufficiently to obtain a flat surface. Also sand off the wood filler that may be on the planks. Then, finish sanding with a 180 grit.

Apply the wood finish of your choice. Personally, I like the natural colour of the wood so I used a marine wood finish gloss without any colouring.

BRIGHT IDEAS

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

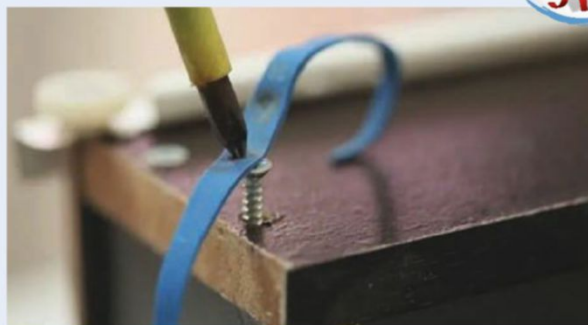
How to unstick a stuck screw

WINNER

Stuck screws can be a real hassle. If the head of the screw you want to remove is starting to get stripped, you can try placing a sturdy rubber band over top of the head of the screw and pushing your screw gun through the rubber. Sometimes, this will give you just enough grip to get it going. If the head of your

screw is filled with paint, you can try putting a screwdriver in the slot on the head and tapping with a hammer to remove some of the paint so that you can grip the screw with your driver. For a screw that is bent, try using a pair of vice grips to grab the screw and turn it to remove it.

Trevor Meijboom, by email



Sand hard-to-reach spots

Sanding surfaces that are multiplanar or curved can be challenging. A regular orbital sander or sanding block won't reach all the spots you need to get to. For tricky tight spots, you can use objects other than traditional sanding blocks to reach any tough places you need to smooth out. For corners and thin surfaces, you can wrap sandpaper around a tongue depressor or a paint stir stick. For the interior of a curved surface, you can use a pencil, a screwdriver, or a roller handle. For larger diameter curves, a section of a PVC pipe or a pool noodle works well. If you're having trouble getting your paper to stay put, you can glue it or double stick tape it onto your makeshift block.

Jerushan Chetty, Durban



Finding dropped nails

To keep screws and nails from causing a hazard on the floor when they get dropped, use a magnet to pick them up. Sure, there are specific tools for this, but really any magnet will do. Double stick tape on the end of a roller pole or tie a magnet to a string to save your back from pain. For easy removal, use a Ziplock bag or piece of butcher paper between the magnet and the hardware. Pull your cover off over the trash can or container. This trick can also attract metal shavings, so gloves are a must to protect your hands.

Bo Miller, by email



WIN!

A Tork Craft Angle Grinder AG 115B -TC20110 from Vermont Sales

This tough new unit is fitted with a brushless long-life motor and cast metal gear housing, a quick-change wheel guard release, a spindle lock for quick and easy wheel changes, a 3-position side handle offering great control with a build in wrench holder located in the handle, and safety switch all offering the ultimate comfort and peace of mind. The disc diameter is 115mm.

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).

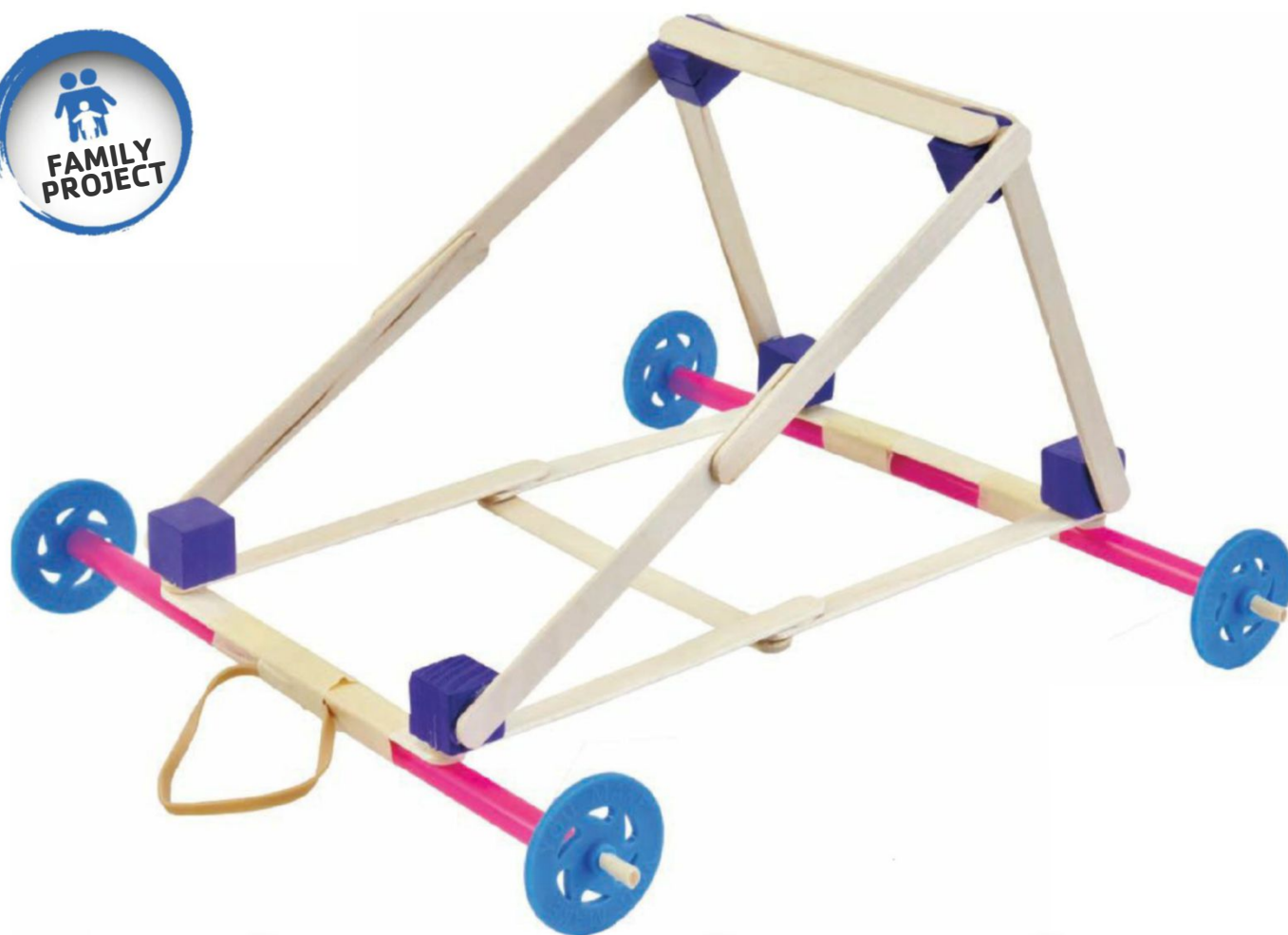
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of power tool accessories



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Congratulations to Trevor Meijboom who wins a Tork Craft 3 Piece Multi-Tool Set.



Take your best shot

Learn how to make a slingshot car with the young ones.



What you need

- 8 Craft sticks
- 4 Wheels
- 2 Straws
- Dowels
- 1 rubber band
- Masking Tape
- Hot glue with safety nozzle
- Craft cube
- Plastic cups (for stackable crash targets)

This slingshot car is an excellent introductory project to illustrate how potential energy is converted

into kinetic energy, and the importance of low friction. Just be sure to watch your feet as cars go racing across the floor!

The frame that you build – using the craft/popsicle sticks – can be just about any shape and size that you want. We used a rectangular frame for our example because it has about the same proportions as a real car and it's easy to build.

Create the wheels by putting a dowel into a straw, then put the plastic wheels onto the ends of the dowel. Wrap a small piece of tape around the ends of the dowel to prevent the wheels from falling off.

Use 2-3 layers of masking tape to attach a rubber band onto one end of the frame.

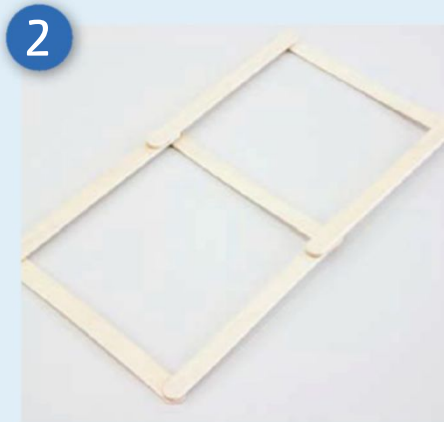
This step completes the essential car frame.

It's fun to make the car personalised. Your children can use craft cubes and sticks to give it a cool profile, and if they're feeling creative, they can paint it or add stickers/decals.

Next, set up the launcher. To do this, tape a pencil to the floor. Make sure to layer and crosshatch the tape to keep the pencil secure to the floor. Place the car on a smooth, flat surface with the rubber band pointing in the direction that the car will be traveling. Hook the rubber band onto the pencil eraser. Pinch the back centre of the car frame, pull back, and release!



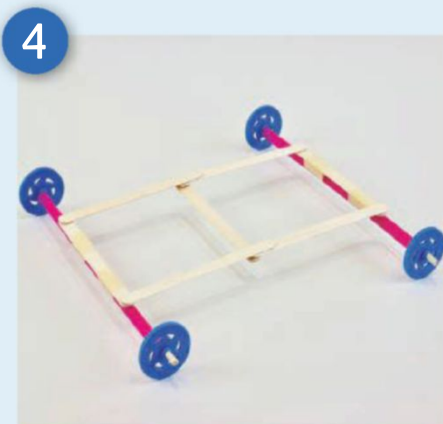
All the supplies you will need



Make the frame



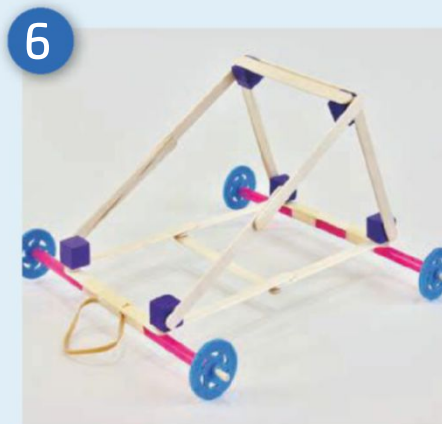
Create the wheels by putting a dowel into a straw



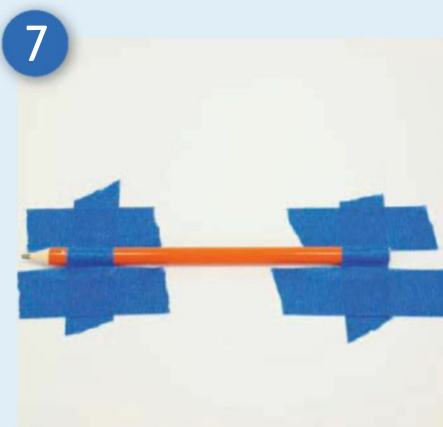
Add the frame to the wheels



Use 2-3 layers of masking tape to attach a rubber band onto one end of the frame



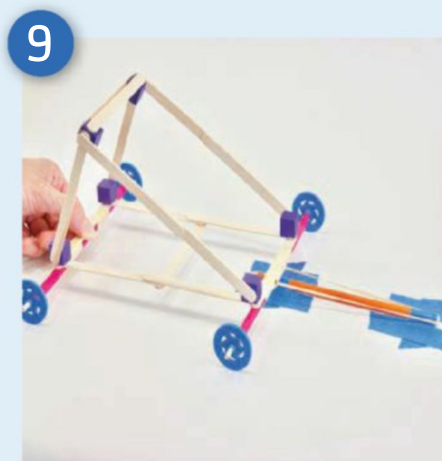
Personalise your car any way you want



Tape a pencil to the floor. Make sure to layer and crosshatch the tape to keep the pencil secure to the floor



Hook the rubber band onto the pencil eraser



Pinch the back centre of the car frame, pull back, and let fly!

Safety, tips and troubleshooting

- Don't allow kids to fling the cars directly at other people or pets.
- Some children will want to crash their cars into things. Bring plastic cups and stack them into pyramids to make some dramatic and appealing targets.
- If the car is spinning out, make sure the wheels can spin freely, and that the wheels are aligned.

ASK OUR EXPERTS

Our panel of experts answer your questions on DIY problems

Remove stains from a kitchen sink

WINNER

In order to submerge the cells of the salt chlorinator, I spilt the pool acid/water dilution (1:10) on the kitchen sink. I've rubbing with stainless steel wool to no avail. Any ideas?

Margie Jungnicz, Edgemoor

Ed replies: Although the various type of stainless steel grades might vary in terms of metallurgic composition and manufacturing, one trait that is common to them all is the passivation layer. This coating of chromium oxide is formed once the surface comes in contact with oxygen.

The layer allows the finished texture of the stainless steel to show through as well as providing a variety of aesthetic options from matte to a high gloss. The passivation layer is considered impermeable to water, self-generating and protects the metal. Although it might stain under extreme temperature changes, it continues to endure. Nevertheless, stainless steel can still be vulnerable to corrosion under the suitable circumstances.

The following equipment will be necessary for your acid removing task:

- Hand gloves

- A mask
- Spray bottle
- Plain water
- A towel
- Baking soda
- Ammonia
- A soft dry cloth

Step 1: Wear hand-gloves and a mask
First of all, wear hand gloves to protect your hands from irritating chemicals. In case of a chemical stain, wear a mask for safety. However, you can skip the mask for acidic food stains. Utilise your dishwashing gloves or latex gloves for this task.

Step 2: Clean the stained surface
Now clean the stained surface by rinsing plain water on the stain. A spray bottle is handy for vertical stainless steel surfaces.

Step 3: Make a paste of baking soda
It's time to make a paste of water and baking soda. So, mix an equal proportion of baking soda and water which will leave a fine paste after rubbing the ingredients smoothly. Add more water to transform into a liquid cleaner.

Step 4: Rub the stain or spill
Now pour the baking soda and water

mixture into a spraying bottle. Soak the affected area with this liquid and rub the stain smoothly to get effective results.

Step 5: Flush plain water on the stain
Now flush plain water to clean the stain cleaner from the stained surface. Then wipe the surface with a soft cloth.

Step 6: Dry the stainless steel surface
Use a soft cloth to dry the cleaned surface; it will protect your stainless steel surface from scratches.



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Our winning query comes from Margie Jungnicz who wins a subscription to *The Home Handyman* magazine for a year.

Patio slab on top of uneven patio slabs

Google and/or YouTube are usually my friend, but all I can find is articles/vids on starting from scratch to make a patio.

I have large(ish) existing concrete slabs, many of which are flat, the occasional few are slightly uneven. Photo included. I feel like this is an excellent and easy starting place for laying new patio slabs on top, rather than trying to dispose of the old slabs and almost starting from fresh.

The existing slabs go between a loose stone wall and a soil border by the house, so raising the height by 50mm or so won't be an issue. I have 60 concrete slabs that I won't have to dispose of.

1. First, importantly, are there any potential downsides I'm overlooking? Do I need to raise existing slabs for a specific reason?
2. If it is okay to lay on top, what approach should I use to level over the existing slabs and then adhere the new patio slabs?
3. As shown in the photo, I have a lot of weeds or grass between the existing slabs, how do I stop this with the new slabs? Is sand between enough or do I need something else?

I don't mind hard work and I don't mind it taking a lot of time, I'd rather this and to get it right than rush it and get it wrong.

Toby Hill, by email

Ed replies: We chatted to a builder and he suggests that you lift the most uneven existing slabs and re-bed them. Then lay the new slabs as you propose, on top using a sand/cement mix but do try to stagger the existing and the new joints. As for the weeds, he suggests placing a plastic membrane between the two layers of slabs.



Half wall of tiles, other half wallpaper – what to do at the join?

We are in the process of decorating our downstairs loo. The bottom half of the walls is tile, topped with a metal tile trim. The top half of the walls is wallpaper.

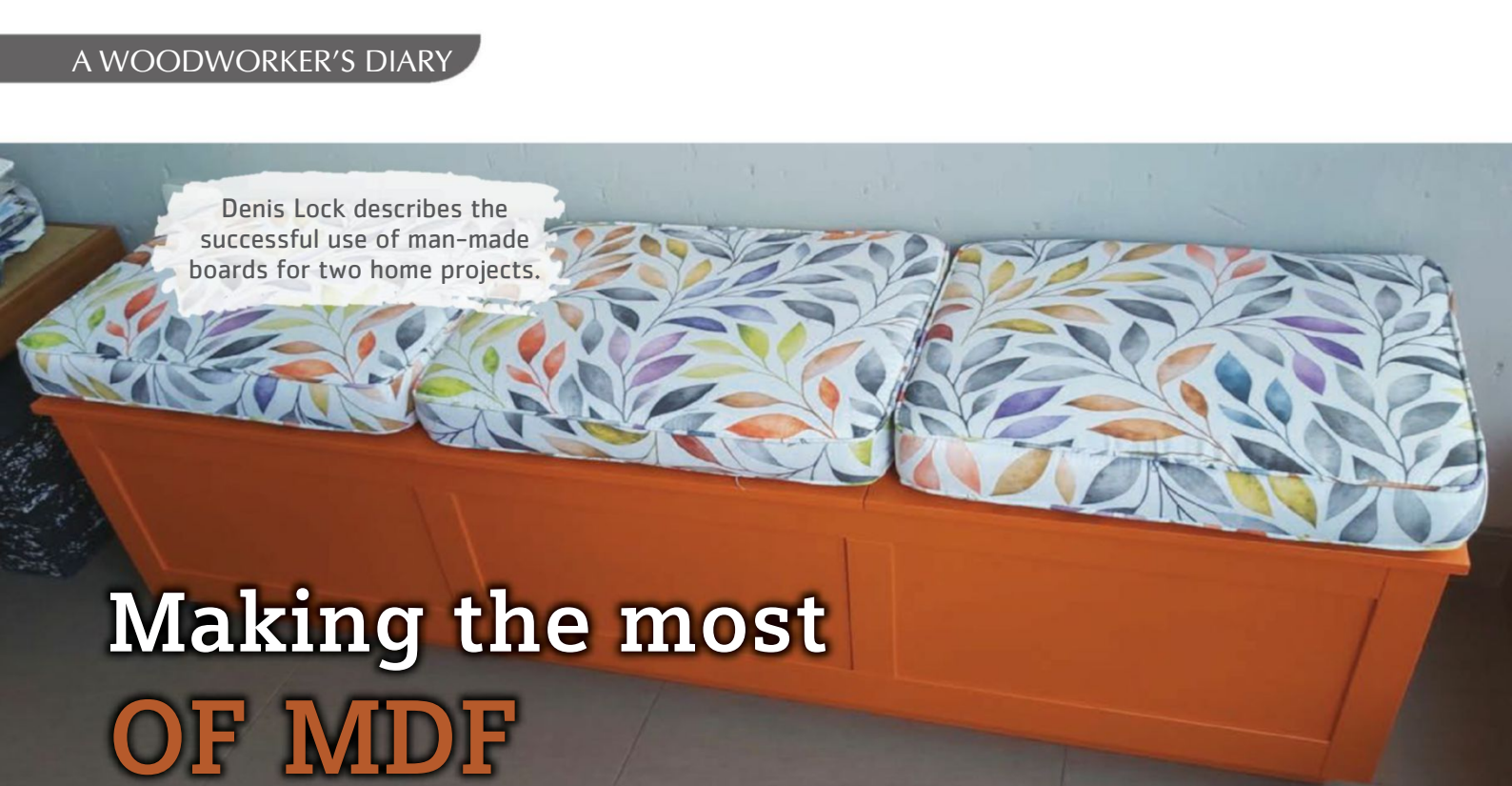
While wallpapering, I noticed that I couldn't get the paper tucked in behind the trim in all places along the wall as the tile adhesive stopped it. Also, it was my first time wallpapering and I definitely could improve my skills! This has resulted in a somewhat wobbly line of wallpaper where it meets the trim.

How can I fix this? I was thinking I could use silicone or caulk to hide the wobbly line. I have tried googling and can't really find many people talking about doing this where tile meets wallpaper so I'm not sure if it's a silly idea?

Belinda Wessels, by email

Ed replies: That could end up being an ugly bead if you do it using silicone. I would suggest you buy a dark wood quadrant to match the shelf and fit this to cover the join.





Denis Lock describes the successful use of man-made boards for two home projects.

Making the most OF MDF

I started woodworking more than 70 years ago. My original tools were a 12" Hobbies fretsaw (left side of Photo 1) and a Hobbies Archimedean drill (right side of Photo 1). In addition, I had a small cutting table (with a V-opening) that I clamped to a convenient table or bench. My material was 1/8" plywood recovered from the containers that were used to import Ceylon tea. I soon progressed to other hand tools (like a tenon saw and chisels) and in 1953 to powered machinery. I also moved away from plywood to solid wood. I was lucky: the carpentry foreman at the Rose Deep mine (where I lived) allowed me to rake through the offcut pile as did the owner of the local furniture factory.

The next step was to buy solid wood from the local timber yard. I can't remember exact prices, but I can tell you it was between one-thirtieth and one-fiftieth of what I pay today. I became a solid-wood bigot. Other than use for drawer bottoms and cabinet backs, I shunned plywood and Masonite as inferior materials. For twenty years I built furniture and other wooden items from solid wood. I regarded anything with veneer, plywood, chipboard or MDF as cheap and nasty. I scornfully referred to chipboard as Weetbix.

Forty-five years ago, I owner-built a new home to house my expanding family. I soon found out that it did not make sense to use solid wood for shelves and panels in built-in cupboards, wall units, vanity units and the like. Man-made boards such as a melamine-faced chipboard and raw or veneered MDF (medium density fibreboard, known to a lot of people by a common brand name – SupaWood) have a lot of advantages for these types of projects. Cost tops the list followed by stability and availability in large sizes. I soon learnt that traditional joinery techniques like mortice and tenon, and

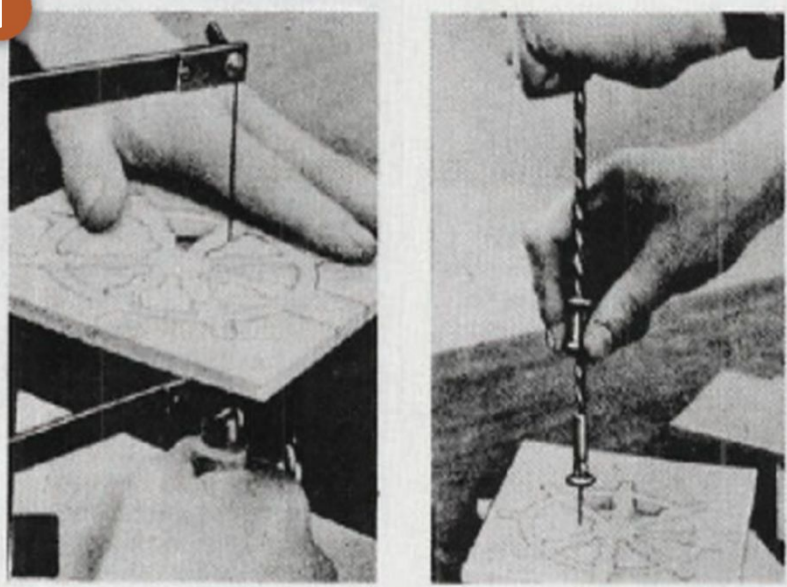
dado and rebate did not apply to these boards. I bought my first biscuit joiner and learnt how to build cabinet carcasses using butt joints reinforced with biscuits, glue and screws. These techniques are documented in my July/August 2020 article: *Make the most of your biscuit joiner machine*. I am no longer a solid-wood bigot.

When my son asked me to build a window seat come storage unit in his bay window alcove, I immediately decided to use 16mm MDF as the main material. Photo 2 shows the alcove in question. The seat/storage construction basically consists of two MDF boxes (Photo 3). Each box (one the mirror image of the other) is made from five pieces of MDF. The pieces are: a base, two ends, a back and an extended front. The front is extended to reach into the triangular part at each end of the alcove. All of the joints are simple butt joints – no fancy joinery. Biscuits were used to provide alignment of the butt joints. Alcolin cold glue was used in the joints as a strengthening agent while screws provided additional strength and a clamping force while the glue was curing. The two boxes were placed in situ, screwed together and screwed to the plinth that had already been installed and levelled.

The next step was to cut four lids to size (Photo 4). Handholds were then pattern routed and the lids were painted (Photo 5). I had some veneered (cherry) 16mm chipboard over from a previous job. I used this to make framed panels to cover the front of the MDF boxes. Four of these panels are seen (being varnished) in Photo 6. Photo 7 shows the panels fitted and the lids in place. Compare Photo 7 with Photo 4: who would realise that the major part of the window seat was made from MDF. Photo 8 shows the type of cushion we used to cover the seat. The window seat in the sun is in demand: however, you

>> Denis Lock

1



How I started

have to chase the cat, Zoë, off first. Lift the cushion, lift the lid(s) and gain access to oodles of storage.

My son's window seat allowed him to neatly store all the stuff (that is the only word for it) that was cluttering his lounge and dining room. I had been wanting to make a bench to provide extra seating on our patio and I decided to apply the lessons learnt from the window box and to gain some much-needed storage at the same time. I measured the various plastic boxes that needed storage and I measured the planned location on the patio. After some sketching and calculations, I decided to make one big box and add two partitions to give three equi-sized storage spaces. The size of each storage space is: length – 600mm, height – 360mm and width – 440mm. My calculator says this is just under three tenths (0,29) of a cubic metre: quite a lot of additional storage. Seven pieces of MDF were needed: a front, a back, a bottom, two ends and two partitions. My track saw made easy work of cutting these seven pieces. As before simple butt joints using biscuits, cold glue and screws were used to construct this 1864mm x 376mm x 472mm box (Photo 9).

Unlike the window seat the patio bench did not fit into an alcove. The joint lines and screw holes were showing on three faces. I had previously experimented with making an imitation frame-and-panel door by gluing strips of 6mm MDF onto the edges of a 16mm MDF board. I decided to take the same approach with the bench. Photo 10 (the box is upside down) shows the result. Strips of 60mm wide 6mm MDF have been glued onto the end of the box and hide the joint lines. These simulate the stiles and rails of a traditional frame-and-panel construction. The simulated bottom rail (on top of the photo 10) is 10mm wider at 70mm. This is standard frame-and-panel practice. A small 1mm chamfer has been routed on all the edges of the 6mm pieces. I always do this with frame-and-panel construction. My late father told me "If you can't hide a joint make a feature of it."

Photo 11 shows the face of the box ready to receive its simulated frame-and-panel treatment. The arrow highlights one of the screw holes that needed covering. I have a lot of C-clamps so I make good use of them as

2



Bay window alcove

3



MDF boxes

4



Lids fitted

5



Painted and handholds cut

6



Front panels

7



Construction completed

8



Zoë's favourite spot

9



MDF boxes

seen in the attachment of the simulated top rail (Photo 12). Photo 13 shows the simulated rails and stiles on the front and one side. The effect of the chamfering of these pieces is obvious.

The three lids are also made from 16mm MDF. The edges of MDF are not that strong so I have added a mitred solid wood frame (Photo 14). The inset shows the neat job pattern routing makes of the handholds. I kept the pattern used for the window seat lids. One thing that MDF does not handle well is excess water. I will not use it for a plinth. As seen in Photo 15 the plinth was made from solid wood. Note the use of the sash clamp used diagonally to pull the assembly dead square.

I don't remember what made me decide to use orange paint (Photo 16). I am glad I did: the bench is the focal point of our patio. Photo 17 shows the completed bench in position on the patio. The cushions are temporary: we started using the bench and its storage straight away. My design included a wall-mounted backrest. I wasn't quite sure what size to make it and at what height to mount it. Out with the masking tape and a mock-up on the wall as seen in Photo 17. I was happy after three iterations. It occurred to me that the next time I hung a picture I would mark out the position with masking tape and adjust till I was happy. Only then would I take out the drill.

I now had the measurements for the backrest frame I was able to make it from MDF as seen in Photo 18. The protruding ledges (one marked with an arrow) provided the attachment point for the padded backrests. The backrest frame was attached to the wall using a French cleat. You can just see this cleat in Photo 19. Now came the agonising task of selecting the material for the cushions. A trip to the local fabric shop resulted in the purchase (nothing for nothing today) of three samples. Our choice is seen in Photo 20. The finished bench seats three comfortably, provides place for one to lie and read and meets its primary objective – more storage.

10



Faux frame-and-panel

11



Now for the front

12



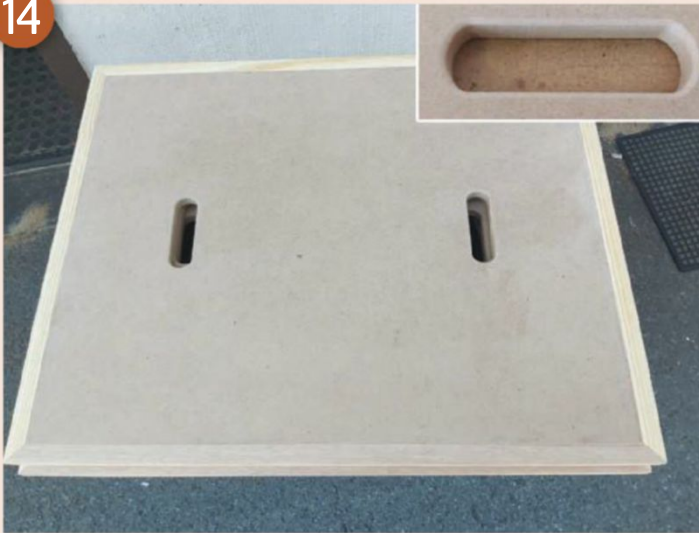
Lots of clamps

13



V formed by chamfers

14

*Lids*

15

*Plinth*

17

*Installed*

16

*Ready for installation*

19

*French cleat*

18

*Backrest frame*

20

*Upholstered***ABOUT DENIS:**

Denis Lock runs a woodworking school and shop. 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

Would you make this?

When you love your cats as much as you love woodworking, this is something you might look at making!



Meet the maker – Grant Longmore

Behind every one of Woodbender's chairs you'll find the story behind the beautiful design. These are no ordinary chairs, they tell a story. The charismatic Kariba chair has its own story to tell, and it starts with a man called Grant Longmore, Technical Director at Woodbender.

Grant joined Woodbender in 2018 and has been an invaluable member of our team. Coming from a creative family, Grant was born and raised in the Natal Midlands. After finishing school, Grant completed his degree in Mechanical Engineering in Durban, followed by years spent in the steel construction industry and 8 years in London working on computer network infrastructure.

Back in South Africa, Grant opened his own kitchen design and manufacturing business, followed by eight years in the furniture manufacturing and design industry. Grant brings with him years of experience and since he joined, designed our iconic Kariba's, Makuti's, Henley Chair, Calvin's, Abbey Chair and more.

The Kariba design process started as an experiment, but it was soon decided that the Kariba had to truly be part of the furniture offering at Woodbender. Fewer parts and joins make this design extremely durable and strong, whilst

showing off true minimalism and African flair.

"Simplicity is the ultimate form of sophistication and we kept this in mind when designing the Kariba. There was a need in the market for a dining chair that is both compact and comfortable, and we felt that a simple silhouette with a slightly wider seat would be the answer" explains Grant Longmore.

Inspired by Africa

Like several of its chairs, the Kariba takes its name from a small town in Southern Africa, found tucked away along the shores of breath taking Lake Kariba in Zimbabwe. A country full of vast, raw natural beauty, Kariba itself is a reflection of tranquillity from the waterways, set against a rugged landscape. This contrasting beauty is evident in the Kariba, in its form, as well as its function.

Open-back chairs such as this one are more compact than some of the larger dining room chair designs. They take up much less space, without compromising on comfort in the slightest. Linger around the table after dinner and enjoy the feeling of the tilted backrest and sloping arms.

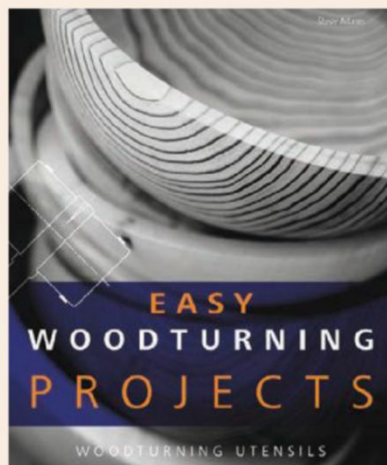
For more information, visit www.woodbender.co.za



Woodworking books you should check out

Easy Woodturning Projects by Steve Adams

The more we like to touch an object, the longer it can be found in our household. Nowadays, these wooden objects often are replaced by plastic resulting in a limited lifespan as a standard. How delightful it is when an old chisel finds its way into your hands at a garage sale, its handle polished by touch and its frayed end telling of heavy use. That is exactly the feeling this book wants to convey - to recall and revive forgotten utensils!



Woodturning with Resin Complete Beginners Guide by Simon Phil

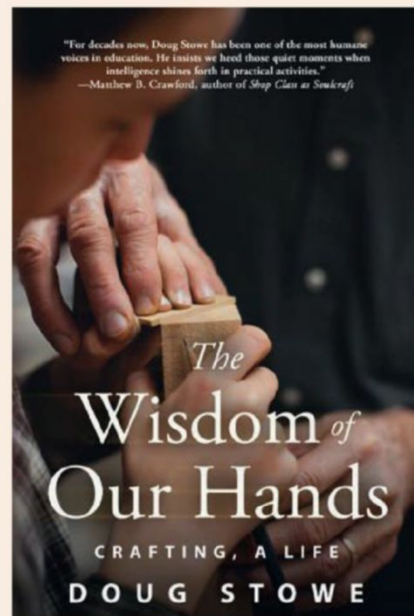
Resin is typically the name given to refer to a naturally-occurring organic compound that is sourced from plants. It usually consists of noncrystalline, liquid substance that if fusible, making it an effective alternative to plastic and other forms of design. Resin is a type of thermosetting compound that is composed of various chemicals that work together to form a bond that enables them to stick together. Two-part epoxy is a combination of epoxy and a hardener that are mixed together to create a single solution. Since it's a thermosetting compound, a two-part epoxy sets, and cures when exposed to a specific temperature for a specific duration length of time.

Depending on the scope and amount of epoxy applied on a material, the curing time can last for a few minutes to more than 24 hours. Epoxy resin or resin is a two-component material that cures within a few hours of the components being mixed, and can then be cut, ground, and polished. In contrast to



polyester and polyurethane resin, resin epoxy shrinks considerably less during curing. All other products could come loose from the wood in a few hours or days and as a result, are not appropriate to use. There are products for different areas of application, and it is important to choose the right product. With this simple guide you can be rest assured of starting your woodturning projects on the right track.

The Wisdom of Our Hands

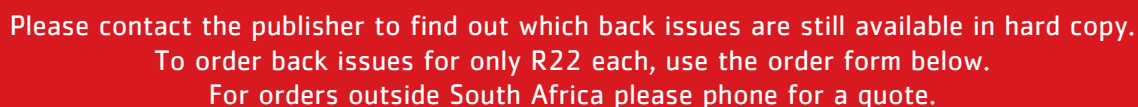


What is the value of doing things with our hands in a modern automated world? Woodworker and educator Doug Stowe argues that there is a huge value in tangible work that goes far beyond the product of the work itself.

Stowe has been a woodworker for 45 years and a teacher of handcrafts for 20 years. In this thoughtful book he explores the connection between doing things with our hands and how we learn new things and create. He discusses in depth the fundamental role Educational Sloyd, a compulsory manual training program, plays in Scandinavian schools, and he mourns the continuing retreat of manual training of any kind in modern schools.

As a woodworker, Doug Stowe is known for finely crafted boxes with intricate inlays, but as a teacher and author of this book, he should be commended for his efforts to open up the human mind with our own hands.

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ARTI-GRASS
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ARTIFICIAL GRASS



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- Long term investment



25mm Augusta



25mm Cruz



30mm Pet Grass



**40mm Soccer
Duo Rye**



13mm Multisport



30mm Autumn



30mm Spring



35mm Supreme



Building up a wide range of DIY skills is personally rewarding on many levels. After all, you never know what manner of new projects lie ahead in the coming months and what skills they might require to complete.

How to become a better DIY'er

Now is a great time to set a few new DIY goals that will help you expand your knowledge base and get stuff done around the house. Here are a few tips on how you can become a better DIY'er.

Set DIY goals

Setting specific DIY goals is undoubtedly the most important step in becoming a better DIY'er. Not only will making a list help you frame out more realistic expectations, it will serve you well as a progress guide.

Take classes

One of the easiest ways to expand your DIY skills is taking classes. In many places, local organisations offer affordable instructional classes on specific projects, construction and home improvement techniques, and the tools needed to complete them. Also check out your local hardware store – many of them hold regular workshops.

In addition to learning a new DIY skill, many of those classes also offer an opportunity to meet and network with other DIY'ers in your local community. These classes are a great way to share knowledge and expertise, and you never know what you might learn or who you might meet.

Volunteer

Volunteering is another great way to

learn a new set of DIY skills. Non-profit organisations frequently use volunteers in building projects where you often get to work alongside seasoned professionals who love what they do.

This will help you master a new skill set at your own pace while challenging you to do something you might never get a chance to take on otherwise. Of course, volunteering also helps people in need and is a great way to give back to the community. While non-profits are a good place to start, you should also consider volunteering yourself for projects with friends and family members, though this may require doing more learning on your own than not.

Self-learning

In 2022 the internet is now the driving force behind the DIY movement, and for a very good reason too. You can learn just about anything online, and if you search hard enough, you can actually find solid advice on how to tackle just about any DIY project around the house that you can imagine.

Using the internet to expand your expertise is probably the easiest way to

become a better DIY'er. The best thing about learning online is that most of the content is available to everyone free of charge.

Get outside your comfort zone

As a rule of thumb, it's best practice to learn at least one new skill with each DIY project you start or are involved in, whether it's learning how to wire a simple electrical device, or learning how to properly finish a wooden surface. But in order to do that, you will need to tackle a few projects that reside outside of your usual comfort zone.

That shouldn't be taken to mean that you should take on a project that is well beyond your expertise, however. It means that you can, but branching out in small steps is always the best way to start to expand your personal skill set. If you learn something new on each project, it won't be long before you are comfortable doing things you never thought possible. Not only that but as you learn to assimilate the knowledge you gain and expand your thinking you will utterly amaze yourself time and time again.



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Kursusdatums: 9 Julie 2022 en 22 Oktober 2022

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10 ESSENTIAL TOOLS FOR EVERY TOOLBOX



Screwdrivers (ECOSSET) | Pliers (HDC180) | Hammer (HAMB300) | Utility Knife (WAC2) | Adjustable spanners (AW150 / AW300)
Tape measure (MHT5) | Insulation Tape (HT2) | Cable ties | Multipurpose Lubricant (FOSPRO) | Torch (HEADLIGHT)