

The Home HANDYMAN

November/December 2019 • Vol 29 No 11



SA'S
ORIGINAL
DIY
MAGAZINE



REFINISH A DOOR



MAKE INEXPENSIVE
WOODEN STARS



The colour issue!

Colour in the home
Brighten up your garden
Work wonders with wallpaper



- Make wooden spatulas
- Secure your home these holidays
- Tips from the experts:
How to cut down a tree
- How to install downlights



RSA: R39.90 (VAT incl.)
Other Countries:
R34.70 (Excl. tax)

The in's and out's of solar power

SIMPLE SOLID POWER



STANDARD DUTY INDUSTRIAL POWER TOOLS

Rutherford
a member of the **Worthington** group

 MakitaPowerToolsZA  MakitaToolsZA

For more info, contact Rutherford:
JHB: 011 878-2600 • CT: 021 832-0568 • DBN: 031 717-6400

www.makita.co.za



A.SHAK

Est. 1958

0861 1ASHAK

0861 127 425

E: sales@ashak.co.za

www.ashak.co.za

TRANSFORM WALL TILES & MELAMINE CUPBOARDS

Just TilePrime and then paint them!

First Prime ...

**DIY
MADE
EASY**

Then Paint ...



TIP:

Mask Areas You Do Not Want
Painted With Masking Tape!

TIP:

Clean Surfaces Before
Priming For Best Results.

- Apply TilePrime with a brush or roller
- It is economical & easy to use
- TilePrime Offers excellent adhesion
- Clean equipment with water afterwards
- TilePrime is dry after 24 hours
- Apply paint over TilePrime
- TilePrime is compatible with most paints
- **Do not paint kitchen work surfaces!**

TilePrime

Litre Covers $\pm 10m^2$



CONTENTS

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

Address: PO Box 24938 | Gezina | 0031 | RSA

Office: 065 849 3264

Fax: 086 234 5026

Email: editorial@homehandyman.co.za

Publisher Hannes Lindeque

Associate publisher Allan Swart: allan@homehandyman.co.za

Editor Gregg Cocking - editorial@homehandyman.co.za

Feature writers André Gous, Annalien Grensemann, Catherine Reimers, Clifford Roberts, Kim Roberts and Warren Schmidt

Technical consultant Denis Lock

ADVERTISING REPRESENTATIVES

Wilma Lindeque 065 849 3264

Email: advertise@homehandyman.co.za

Ruth Schultz 083 583 5243

Email: ruth@homehandyman.co.za

HOW TO SUBSCRIBE

Email: subs@homehandyman.co.za

Fax: 086 234 5052

Online www.homehandyman.co.za

Layout & design dee@stormdeezigns.co.za

Printing House of Print | 011 474 8750

Distribution Republican News Agency | 011 248 3536

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.

The views expressed in this publication are not necessarily those of the publisher or its agents. While every effort is made to ensure the accuracy of the contents of this magazine, neither the editor nor the publisher can be held responsible for any omissions or errors. Images used are for illustration purposes and are not endorsed by *The Home Handyman*. Every care has been taken to ensure that all the information and projects presented in this publication are accurate, reliable and safe. It should be noted, however, that the ideas for design and product use are presented as suggestions only! The editor strongly advises that the reader check local by-laws and consult a qualified professional before undertaking any project and cannot be held responsible for any loss, damage, injury or death resulting from any information contained here.

Copyright: The Home Handyman, 1994. Copyright is expressly reserved and no part of this magazine may be reproduced or transmitted, in part or whole, in any form or by any means, electronic or mechanical, including photocopying, recording or any information storage or retrieval system without prior permission of the publisher. All enquiries regarding editorial correspondence, manuscripts and photographs should be directed to the editor.

FEATURES

12 Colour

Paint is a fantastic way to quickly transform your home

16 Woodworking

Learn how to make these simple, inexpensive wooden stars

18 Wallpaper

How to hang wallpaper

22 Metalworking

Use your metalworking skills to make gifts for the family

28 Timber construction

Myths about timber construction

30 Gardens

Getting colour in your garden

34 Security

Secure your property and belongings by following these simple security ideas

38 Repairs

How to fix an internal room door

40 Solutions

How to get large boards home from the store

42 Craft project

Upcycle an old door

44 Solutions

Tree felling tips from the experts

46 Solar power

The ins and outs of photovoltaic power generation

48 Lighting

7 tips to consider when installing downlights

50 Young DIY'er

Create your own vibrant candle holders



www.facebook.com/TheHomeHandymanmagazine



@TheHomeHandymanmag



https://za.pinterest.com/homehandyman/



12

REGULARS

6 Off the shelf

All the latest products for the DIY'er

8 Voice your views

Your chance to air an opinion

10 DIY matters

News, views and reviews from around the globe

49 Bright ideas

Readers share their innovative time-and-space saving DIY ideas

52 Ask our experts

Your DIY queries answered by our panel of experts

54 A woodworker's diary

Denis Lock shows you how to make wooden spatulas

58 Woodworker's corner

Sharing techniques, ideas and a love of wood

60 Woodworker's showcase

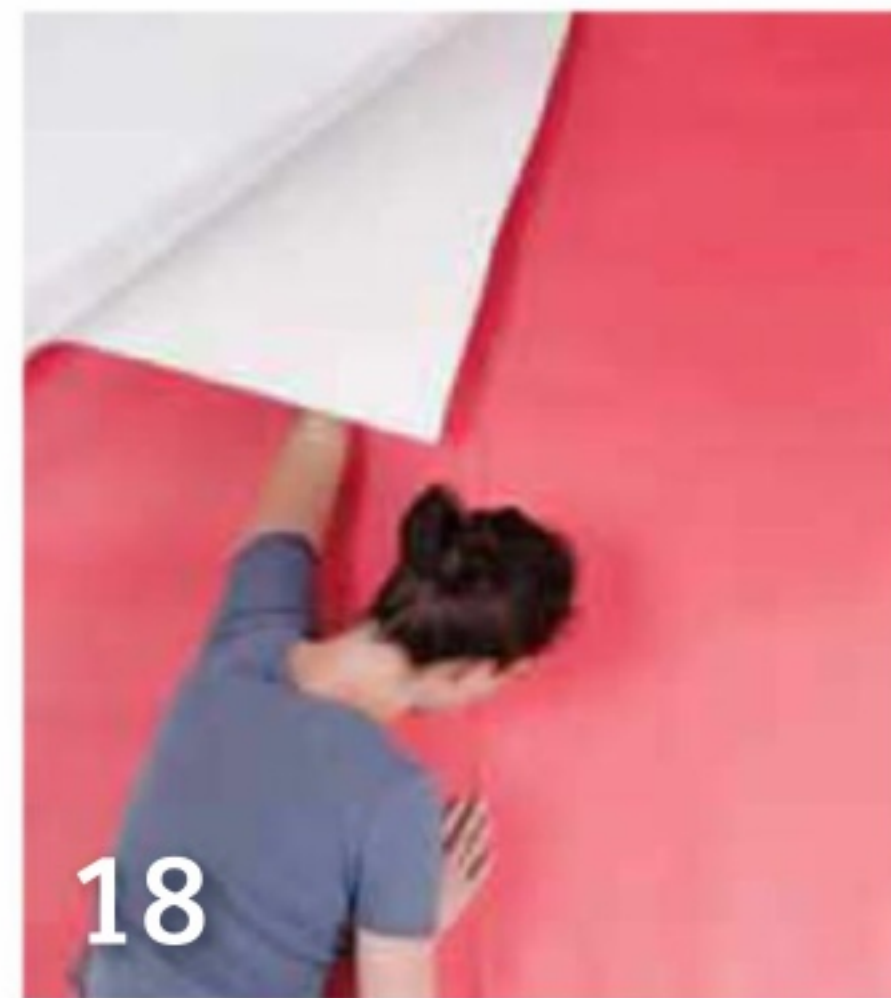
Woodworkers showcase their projects

61 Coffee corner

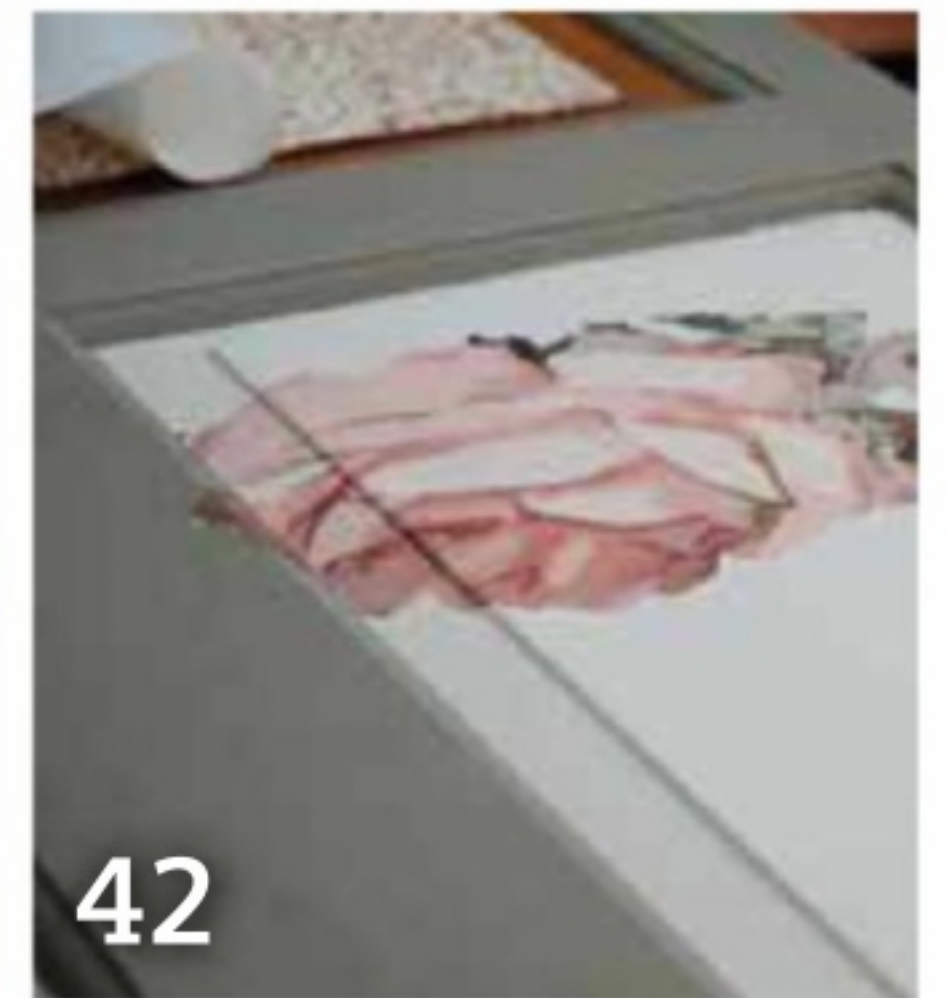
From our workshop to yours

64 Tailpiece

Annalien Grensemann notes how there are so many similarities between life and woodwork



18



42



54

Competitions & giveaways

8 **Win** a Makita M5802 circular saw

49 **Win** a Tork Craft 6 level storage rack

52 **Win** a hamper from Den Braven

The Home HANDYMAN

www.homehandyman.co.za

2019

SUBSCRIPTION FORM

Subscription Fees:

South Africa	Printed	Digital
Back Copy	R35.50	R27.95
6 issues	R209.00	R169.00

Neighbouring countries: R528.00 for 6 issues

Overseas by Air Mail: R618.00 for 6 issues

Subscription fees are valid until 31 December 2019

Subscriber's details:

I would like to receive a printed/digital copy.
(Please indicate)

Start subscription with the issue?

Name:

Email:

Postal Address:

Postal Code: Tel:

Gift subscription from:

Tel: Email:

Direct Deposit / EFT Payments:

EFT - (Electronic Fund Transfer) directly to our account:

ABSA Bank

Branch Code: 632 005

Cheque account: **BB Print** 404 881 8651

Reference: "Sub + HH + surname"
(example SubHH-Lindeque)

Fax/Email proof of payment plus this completed
subscription form to 086 234 5052.

**Please Note: There is an additional deposit fee of R39 if
payment is made in CASH.**

Contact us:

Email: subs@homehandyman.co.za

BB Print | PO Box 24938 | Gezina | 0031 | Fax: 086 234 5052



FROM THE WORKBENCH

Rediscovering a passion

Finding myself as the editor of *The Home Handyman* once again has reignited a particular passion, one which I may not have embraced if I hadn't been editing this magazine.



Before the demands of deadlines and children saw hobbies shelved to the side, I would busy myself in the evenings and on the weekends by buying, playing and restoring guitars. Over the years my collection has been whittled down from around 18 to just the two, but I couldn't help myself recently when I saw a bass guitar for sale at a very reasonable price; it was an SG style bass, which isn't very common, and I had been on the lookout for one for roughly two years. The instrument in question is a Japanese-made Kay brand which dates from around 1967. I was pleasantly surprised by its condition when I first got my hands on it, and despite missing a few non-essential parts, it played beautifully.

Although at first it seemed sacrilegious to tamper with such an old instrument, I decided to refinish it anyway, bearing in mind that I probably wouldn't be selling it any time soon. I hired a heat gun one weekend and removed the previous finish – I find this works better than the chemical paint strippers, you just have to be very careful not to scorch the wood – and then began the meticulous sanding process.

As I moved through the grits (60, 80, 220, 400, 600 for those interested), I remembered how therapeutic the whole process was. I think I may be hooked again... Once the wood was perfectly smooth, I settled on my finish – I went for Danish Oil on the neck, and a wax polish on the body after spending some time chatting to the experts. As you can see from the photographs, it was quite a transformation, and one which I am certainly proud of.

Gregg





BOSCH
Invented for life

The versatile all-rounder

PMF 220 CE Multitool

Use the versatile PMF 220 CE multifunction tool from **Bosch** for your repair, renovation, adjustment and conversion jobs. Cutting, sawing, sanding, routing and scraping are no problem for this multifunction tool thanks to its powerful motor and its many attachments

Home made by you.



BoschDIYSouthernAfrica



@BoschDIY_SA

www.bosch-pt.com

MyBosch

**3 year
warranty**

Welcome to MyBosch
Your world for home & garden

Get three instead of one year warranty on your DIY power, garden and measuring tools from Bosch. Visit www.mybosch-tools.com to register



OFF THE SHELF

Your guide to the latest products in the world of DIY

Instant adhesion

The original instant grip Den Braven High Tack – tried and tested

Instant grip Den Braven High Tack can be used on flat or vertical surfaces without mechanical support for of up to 20kg in weight. Ideal for panels, natural stone, bricks and coated metals as well as wood, skirting boards, windowsills, bathroom or kitchen fittings, aluminium strips for stair nosing's, aesthetic finishing of corner tiles, tile cornices and vertical tiling, as well as for loose tiles. Nothing else on the market compares to its instant high grip capability.

The product is compatible with most metals, is non-corrosive and water-resistant, odourless, low in VOCs (volatile organic compounds) and free of silicone and isocyanides. It also conforms to South African Green Building Council standards

It is important to ensure when applying Den Braven High Tack that the area of application is clean and that the 'v' nozzle is facing upward and the cartridge is held at a 90° angle. Extrude in vertical stripes, not blobs – between 10-20cm apart. Allow sufficient curing time. Den Braven High Tack is resistant to moisture and weather, and there is no shrinkage or bubbling.

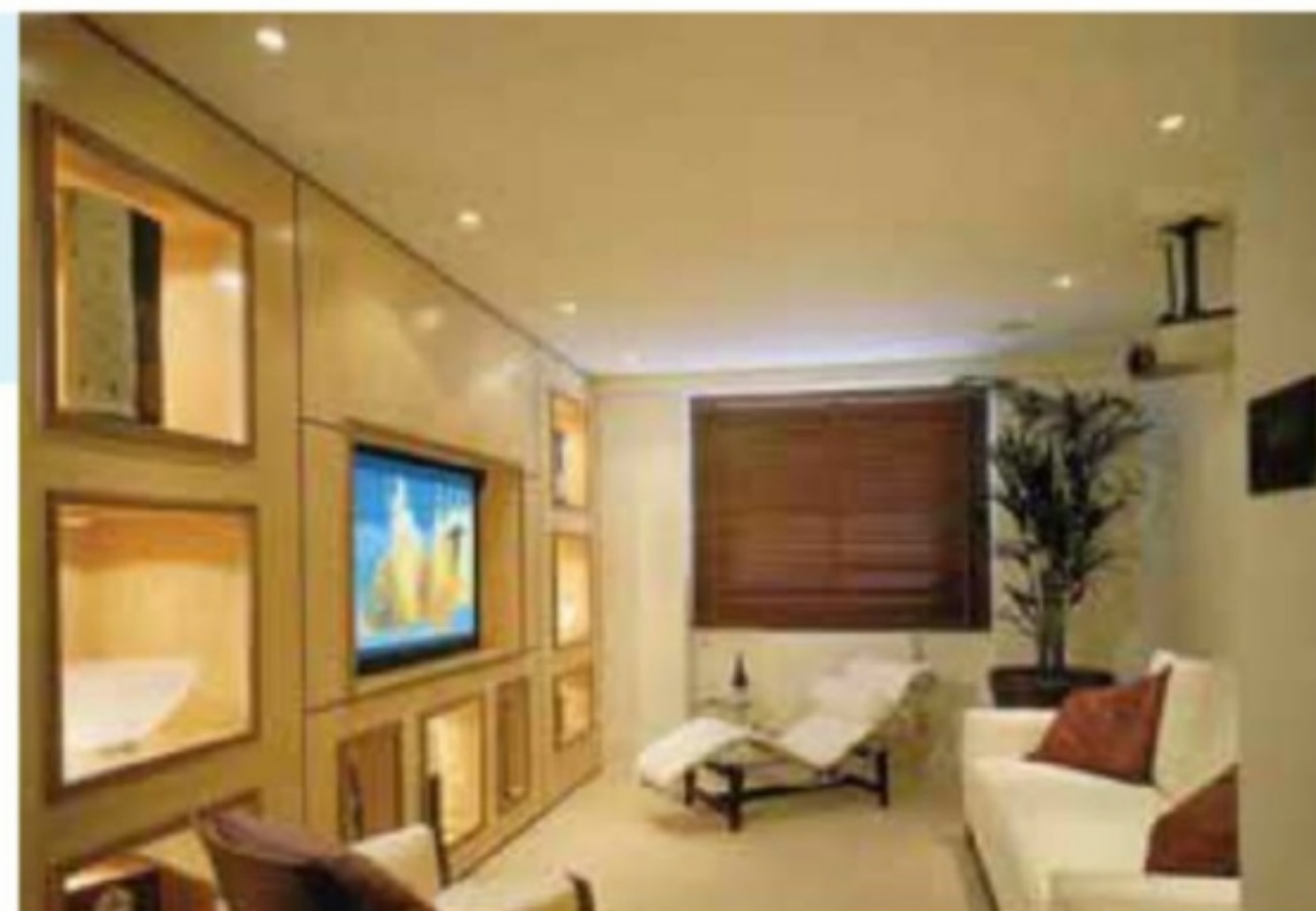
For more information, visit www.denbraven.co.za or call 011-792-3830



Legendary lighting

Homemation expands offering with the latest smart lighting technology

The Lutron story began in the late 1950s in Joel Spira's makeshift lab in New York City. A young physicist fascinated by the aesthetic manipulation of light, Spira commandeered the spare bedroom in the apartment he shared with his wife, Ruth, and set out to invent a solid-state device that would enable people to vary the intensity of the lights in their homes. And the dimmer was born. Since then, they have expanded to include a wide range of smart innovations for home and commercial use.



The Lutron RA2 Select brings you personalised lighting for any home, any budget. Whole home lighting control made simple. With Lutron, you are able to seamlessly control the lighting in your home to ensure impeccable lighting.

Reasons to light-up with Lutron:

- Stay in touch with your home, even when you're not there with the Lutron App
- Monitor and adjust lights on your smart device, whether home or away
- Schedule exterior lights to turn on before returning home in the evening or night
- Use the Away feature to ensure you never leave lights on
- Create the perfect atmosphere for entertaining or any setting, at your fingertips
- Their wall plates have a screwless design which is sleek and easy to clean
- Use the Goodnight button to turn lights off in other rooms, from the comfort of your bed.

When choosing Lutron, you're choosing a manufacturer with a history of innovation – and the leader in automated window treatments since 2003. Cutting edge technology, incredible value and a beautiful solution – now available in South Africa through Homemation.

For more information, visit www.homemation.co.za or call 011-781-8887

Multipurpose finishing sander

The ideal palm grip sander for multiple projects

The Makita MT M9200B is an extremely versatile ¼ sheet palm grip sander and is ideal for coarse sanding of stock through to fine finishing and preparation for paint or lacquer. It will also easily handle the sanding of doors and wooden gates even if they are still mounted and can be used to tackle difficult to reach areas and small objects. This model weighs a mere 0.89kg, has a 2m power supply cord and is supplied with six pieces of abrasive paper.

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



New versatility for perfect cuts

Festool's new technical advanced range of jigsaw blades

Festool has optimised and reworked its entire range of jigsaw blades and you can now use an application overview to quickly and easily find the right saw blade for the job. No matter what your needs are, whether you require speed for straight cuts or precision in tight curves, with cross-set or sanded teeth, a small or large pitch, made from HCS tool steel or carbide-tipped, Festool's new range of jigsaw blades focuses on the essential applications.



They are all supported by the new application guide system that can be used to quickly and easily find the right jigsaw blade for sawing in wood, plastic, metal or building materials. A unique Festool colour coding system additionally provides quick and simple guidance which can be found in the application overview, on the packaging, displays at specialist retailers, online on the Festool's website and in the catalogue.

Festool's new range focuses on a tooth geometry with Japan teeth, for example, for a combination of low-splinter but fast working progress at the right angles. The range also includes a solution for a problems typically encountered in the trade, specifically the machining of twin-wall sheeting. This saw blade hardly smears at all and also keeps splinters to a minimum thanks to neutral teeth.

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

See your
product
in this
space!



**The Home
HANDYMAN**

www.homehandyman.co.za

To advertise in
The Home Handyman's
Off the Shelf,
please contact Wilma
on 065 849 3264 or
e-mail:

advertise@homehandyman.co.za

VOICE YOUR VIEWS

Do you have any thoughts or comments on DIY issues?



Share your opinion

The Home HANDYMAN

www.homehandyman.co.za

Send us your views, ideas and opinions and you could win a Makita M5802 Circular Saw



Send your queries to:
editorial@homehandyman.co.za or
P.O. Box 24938, Gezina, 0031

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

Margie Pienaar

wins a Makita
M9203B Finishing Sander

Prizes are not exchangeable



Finishing question

I finished my workbench top with several applications of Danish Oil, top and bottom. I know it periodically will need re-oiling. Should I re-oil the bottom, too? I know that you're supposed to put equal finishes on both sides of a panel to prevent uneven moisture absorption.

Jim Culler, Cape Town

Ed replies: Even after you apply several coats of oil/varnish to the

top, the level of film finish build-up is too thin to create uneven moisture absorption problems, especially on a panel as thick as a workbench top. Just avoid repeatedly soaking the benchtop with water, which could swell the wood enough to produce cracks when it dries.



Perfect circles with a jigsaw?

I don't have a bandsaw or router, but I needed to cut a circular tabletop. Although a jigsaw wasn't my first choice for cutting circles, it can be done. I began by making an auxiliary base from hardboard. I aligned the edge of the saw's foot with one end of the hardboard and cut a slot for the blade. (I got good results cutting circles with a 10-tooth-per-inch blade). Then I attached the saw with screws (use double-sided tape if your base doesn't have holes). Next, mark a line on the bottom face of the base parallel to the edge and aligned with the blade teeth.

Measure from the inside edge of the blade and mark your desired radius along the line. Drill a hole for a finish nail at this point, and at the centrepoint of the circle on your workpiece. When marking the centrepoint, either measure from the workpiece edge, or drill a blade starter hole to the edge of the circle and chisel a flat surface where

the hole and circle meet. When you put the saw in place, the blade must rest snugly against the edge of the workpiece (or the flat edge of the hole) without deflection.

An auxiliary base eliminates tear-out and also reduces lateral blade movement. You may need screws longer than the stock screws to attach the auxiliary base. Hope this helps some other DIYers – keep up the good work! I hope the attached photo explains this better than I could.

Brian Du Toit, by email



Helpful sanding tip

In the process of refinishing an old chair, I found that my random orbit sander's flat surface didn't work for sanding the concave hollow of the seat. As my sander uses hook-and-loop paper, I recalled reading this tip – possibly in *The Home Handyman* a few years ago – so I bought some adhesive-backed hook-and-loop material at the hardware store.

After sticking the material together with the hooks on one side and loops on the other, I cut out a disc shape that was small enough to fit in the centre of my sander without blocking the dust collection holes. I then applied the paper over the pad. It worked perfectly to create a slight convex bottom on my sander that conformed to the chair's curve, and held the sandpaper firmly in place.

Steve Barnes, Centurion

The Handyman's Prayer

I came across this 'prayer' on Facebook recently and thought it would be fun to share it with my favourite magazine and my fellow handymen and handywomen. I did some research to find its origin, and it was written by a Canadian actor and comedian named Steve Smith for a sketch comedy show.

Here it is:

"O Heavenly Father, be with me this day for I am sore, afraid I will hurt myself again. Let Thy hand guide my hammer towards the nail and away from my thumb. Grant me the wisdom to wear safety glasses. Give me patience to measure twice and cut once, or even measure at all.

Let the saw blade always be somewhere in the vicinity of the line. Bless my drill bit with sharpness so that it will bite into the surface rather than dance across the countertop and fall into the dust bin with me close behind it. When using my nail gun, help me to know when to stop.

Grant me the maturity to put screws in with a screwdriver, not a hammer. Give me the courage to change things I can, accept the things I can't, and the good fortune of my wife not knowing I can't tell the difference.

Thank you Lord for safety chains and fire extinguishers. Thank you Lord for making my workshop look better by creating dimmers. Thank you for all that stuff and hear us when we pray.

Our Father who art a craftsman, perfectionist be thy name. Thy power tools hum, thy walls be plumb, upstairs as they are in the basement. Give us this day a utility shed and forgive us our borrowed tools as we forgive those who borrow tools from us.

But leave us as we are and deliver us from moving, for thine is the hammer and the skill saw and the duct tape forever, Amen."

I hope that your readers enjoyed it as much as I did! My husband and I are in the process of adding a room to our house – all by ourselves – and once it is finished I think I am going to print this prayer out and hang it on one of the walls.

Margie Pienaar, Vosloorus

Ed replies: *Thanks so much for the laugh Margie – I am sure our readers will also enjoy it. If you are photographing your renovation, please feel free to send it through to The Home Handyman for publication at editorial@homehandyman.co.za*

Reader's projects



The Home HANDYMAN

www.homehandyman.co.za

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

Email projects and photographs to:

editorial@homehandyman.co.za



Our competitions – the fine print

Prizes may not be exchanged for cash. The closing date is stipulated by the competition box. If not stipulated, it closes on the last day of the issue. For example: Jan/Feb 2019. All competitions close on 28 February 2019. To enter simply e-mail your answer to: editorial@homehandyman.co.za and include your name, surname, address and a day time contact telephone number with your entry. Unless otherwise stipulated, competitions are lucky draws and the correct entry drawn on the closing date will be the winner. The prize may differ from the picture shown. By entering this competition you agree to all rules and accept that the decision of the publisher is final and that no correspondence thereto will be entertained. This competition is open to all readers of *The Home Handyman* except employees of THH, BB Print and employees who work for the company that sponsors the prizes and their immediate families.

Leroy Merlin opens second store in South Africa

Global French home improvement retailer, Leroy Merlin, officially opened a new store in Little Falls, Roodeport in Johannesburg at the end of August. This is the brand's second store in an active pipeline that will materialise into four stores in South Africa by 2020.

The store is on a 45 000m² campus, nestled within easy reach of neighbourhoods and businesses in the Roodeport area. The sales floor is 9 000m² and offers the widest selection of construction, hardware, tools, kitchen, bathroom, home décor and garden products. With more than 35 000 references and ample stock availability, customers will be spoiled for choice. 30% of the store's entire range is sourced from the Leroy Merlin supply chain in France. 70% of stock is locally sourced: 30% from international brands that have South African operations and 40% produced and manufactured locally.

"South Africans love their homes and are constantly doing improvements, from facelift renovations to complete structural changes. We uncovered the extent to which that passion influences their hardware purchase behaviour before setting up our first store in Greenstone in 2017. Ordinary South Africans welcomed us into their homes and through over 600 home visits countrywide, we learnt people's needs and the existing gap in hardware retail. It was the most insightful research; we listened as people talked us through their aspirations for their homes and their hardware retail experiences," said Cedric Sennepin, CEO of Leroy Merlin South Africa.

"Opening this second store in Little Falls is testament that we are indeed meeting the needs of the South African homeowner and that is the core of the hardware retail business. It is also proof of our commitment to the South African economy, and that we see great opportunities to expand and grow the Leroy Merlin business here. We have two more stores in our pipeline, and we project that by 2020, we will have a total of four stores whose investment amounts to R1 billion," concluded Sennepin.

The Little Falls store employs 210 people: 160 direct employees and 50 indirectly employed through partnerships such as Mugg and Bean and facilities management service providers such as security and cleaning companies.

Leroy Merlin offers easy-return policy, lay-by, click & collect, delivery, cutting and edging, key-cutting, repair centre, tool rental and installation services. Furthermore, customers can get the Leroy Merlin Home Card with offers of 30-day promotional price guarantees, 6-month returns, faster access to services and workshop preferences.

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



Modern-day women tackling more DIY tasks than previous generations



According to a recent international study, women today are much happier to tackle DIY tasks around the house, and are adept at a range of DIY jobs that their mothers and grandmothers would have traditionally not undertaken.

Charles Wagenaar, Customer Service Manager at Brights Hardware, agrees with the results of this poll, and says that from her years of experience in the hardware trade, and hours spent liaising with customers at Brights Hardware, it is clear to see that women today

are far more hands on than previous generations ever were.

"There is an increasing percentage of our women customers who buy tools, power tools, general hardware supplies and paint with which to carry out their various DIY tasks. Brights also employs a large contingent of female staff who operate in all levels of the organisations – from senior management to sales teams on the shop floor." The results of a poll conducted by Yale University found that more than half (57%) of women

New app recycles waste – disposes of hassles

A fast-growing app-based service, working off the grid from a used ship container, is bringing convenience and simplicity to businesses and professionals who need waste removed from worksites. WRAPP (Waste Recycling App) is a South African-born world first, bringing together independent truck owners and the customers who need waste removed – all via an easy-to-use mobile app.

For business owners, project managers, site managers and other professionals, WRAPP makes ordering and tracking as easy as other, familiar app-based taxi and food delivery services. “We want to spare you the hassle of sorting out your waste, while creating work for truck owners in an environmentally conscious way,” says founder Clive Amsel. “It’s one of the primary reasons we exist.”

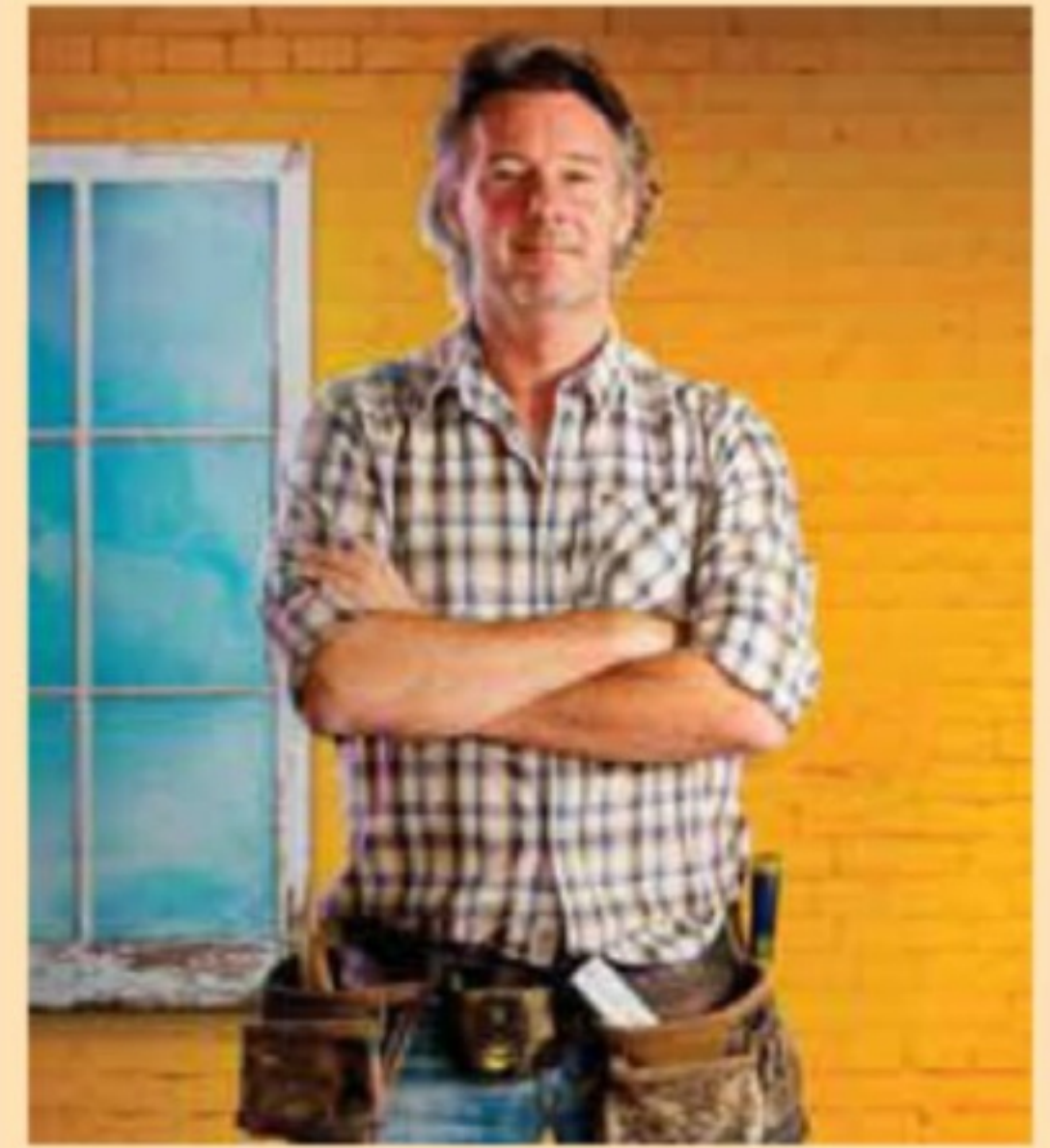
WRAPP allows a customer to choose the waste type, truck type and pick-up time for loads from 1.3 to 12 tons, with quotes in 60 seconds, all on the app. Payment happens after delivery, either via a credit card payment gateway on the app or by EFT. With live tracking and notifications, there’s no need to follow up on the status of the order with calls or texts. In addition, the cloud-based dashboard gives managers access to a full audit trail with time stamps of every load’s life cycle, from removal to recycling or



disposal. It also features useful graphic breakdowns of the data.

WRAPP is a member of the Institute of Waste Management South Africa and is accredited as a waste provider by the City of Cape Town. They currently have 60 service providers registered in Cape Town, Johannesburg and Durban, servicing over 700 clients. Amsel says the service plans to roll out nationally by the end of the year.

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



November highlights on the Home Channel: The Renovation King

Barry Du Bois’s 30 years of design and home building experience are winning lottery tickets for lucky homeowners on The Renovation King. Taking on bedrooms, bathrooms, balconies, playrooms, kitchens and more, the man known as ‘Baz’ has just the right plans to turn the humblest places into palaces. By tapping into his clients’ personalities and working within their budgets, Barry and his team set out to create a symphony of function and form, brimming with aesthetic beauty and plain old practicality. His clients’ needs are met, and he never fails to prove that he indeed is, The Renovation King.

aged between 18 and 30 are happy, and confident, to undertake DIY tasks of varying degrees.

DIY tasks noted in the survey included hanging pictures, painting cupboard doors, painting entire rooms, assembling furniture, hanging blinds and curtain rails, replacing door knobs, changing plugs and fuses and more. Only six percent of the women who took part in the poll said that they avoid any type of DIY at all times, while the remaining participants said that although they don’t feel one hundred per cent comfortable

tackling DIY tasks, they would be willing to give it a go. By contrast, the survey reported that mothers and grandmothers of millennials were far less likely to have tried the same tasks.

According to Wagenaar one of the reasons that women feel more empowered to take on DIY projects than generations before them is the abundance of advice, guidance, tutorials and information on DIY to be found online. “YouTube tutorials, which didn’t exist years ago, are a firm favourite and DIY guru’s – such as celebrity DIY’er

Suzelle DIY – make it accessible, desirable and fun to tackle DIY. While previous generations may have believed that DIY was a man’s job, roles are changing and women are empowered and emboldened to tackle DIY themselves,” says Wagenaar. “Whether it is home repairs, maintenance and renovations or novelty projects such as DIY crafts and creations, women are increasingly mastering the skills and knowledge to do it themselves.”

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

Paint is a fantastic way to transform your home. It's cheap, quick and easy to change the look and feel of a space – and if you make a mistake? Well, it's only a can of paint and a bit of work to change it into something you love.



*Not willing to paint your walls with colour?
Then introduce colour with furniture, art or scatter cushions*

It's tempting to approach a painting job as if it is child's play. Unfortunately this is not the case, otherwise, the countless professional painters and decorators across the globe would not be there in the first place, would they? The truth is, there are one too many things that can go awry with your interior redecoration, especially if hastily put together.

This goes double if you lack the right tools, equipment, and experience to repaint your home's walls or ceiling. If you cannot set aside the required time and effort, then scheduling a professional house painting service and hiring a skilled painter would be the sensible choice. If, on the other hand, you believe that you can handle this task on your own, then make sure you prepare carefully.

Let's begin by stating the obvious – you cannot do everything all at once, so arm yourself with a bit of patience and devote an entire day or so to various painting preparation tasks before moving on to the project itself.

All those wall shelves, paintings, drawers, cupboards, and lamps will only slow you down. If you cannot move everything into an adjacent room, then consider placing your furnishings in the middle of the room and hiding them under a generous amount of drop cloth. Don't forget to also tape the cloth in place and add an extra cover on top to protect your belongings from splashes.

If you've never before painted around doorknobs or cabinet hinges in your life, there's no reason to torture yourself now. To protect your furniture from accidental drips, get some zipper storage bags and place all cabinet and door knobs, hinges, light switch plates and switches inside. To avoid confusion, make sure to label each individual bag so that you know where all bits and pieces should go (living room door, etc.) after you're done repainting your walls.

If your wall surfaces have seen better days, make sure to patch them up before applying the first coat of paint. Repair



Painting your doors can add the touch of you colour your home might need

small holes and cracks and use masking tape to cover any areas, such as skirtings and window frames, which you do not want to paint.

You will also have to dress the part... Unfortunately, wearing your finest business suit will not yield better performance. In fact, you'll end up spending a fortune trying to remove the paint splatters at your nearest dry cleaner. To save yourself tons of hassle, we suggest taking off all your jewellery and dressing in old, but comfortably loose clothing. Such clothes include a pair of slip-on shoes and an old cap or hat (especially useful when painting ceilings). Don't forget to wear some form of eye protection, too.

Finally, an organised workspace can make wonders for your project. Ensure that everything is within a hand's reach by establishing your workstation right in the middle of the area that you're about to paint. So, grab your buckets of paint, brushes, rollers, hammers, screwdrivers, plastic bags, paint can openers, drop cloths and whatever else you need and gather them in a neat pile.

Choosing your colours

For many of us, our homes are a perfect palette of neutral tones, pale shades and magnolia calm. But over time, this colour scheme can look a little tired and

Painting checklist

- Primer
- Paint
- Stir sticks
- Paint rollers
- Small paint brushes for touch-ups
- Paint trays, and if needed, a sturdy holder for your paint tray
- Masking tape
- Stirrer
- Crack filler
- Sponge
- Rags
- Drop cloths
- Depending on the project and surface:
 - Sandpaper
 - Tack cloth to remove any sanding dust
 - Painter's putty
 - Putty knife

also gets dated very quickly. So, how about adding a touch of colour to home? Here are some simple steps to set you on your way.

Tap into the feeling

Choosing a colour, let alone the tone of that colour, can be overwhelming. There's not just blue; there's sky blue,

baby blue, navy...the list goes on. The best question to ask yourself, is 'How do I want this room to feel?' Colour is a massive mood changer and different tones of the same colour can create very different feelings. If you want a warm, cosy living room, look at colours with yellow and red tints in them. It doesn't have to be the obvious earthy tones, a blue-like teal is a warm hue because of the yellow undertone. In contrast, for a starker, more dramatic look, opt for a clean colour like bright cobalt blue or a sophisticated cool navy.

Add accessories

For the faint-hearted, it is suggested that you go neutral for the big ticket items like the couch, flooring and curtains and then adding the colour with accessories. A bold feature floor rug (the largest you can afford), brightly coloured lampshades (switch up those shop bought cream ones), scatter cushions and wall art all combine to make an interesting colour scheme, yet at the same time they can be easily changed and updated over time.

If in doubt, just paint

The most transformational yet cost effective way to update your home is in a pot of paint. For the price of a tin of paint and a weekend with a roller in your hand you can totally transform the look, feel and vibe of your room.

Think outside the box

Use colour in unexpected ways. Why not start off with a bold new hue for your front door, create a colourful feature wall or go all out in one room of the home to see how you and your family like it?

A cohesive colour palette

Stick to a cohesive colour palette and use this as your basis to design all the rooms in your home so there is some flow. While you'll want each room to be different it helps if they work as a set. It's really important to dig deep and work out which colours and hues resonate with

you. If you're stuck on where to start you can begin by looking in your cupboard to see the colours you naturally pick out.

Start with a swatch

People often start off with a colourful wallpaper swatch or a fabric sample to build a colour scheme around. You'll find a combination of colours which all sit nicely together, from neutrals through to brighter accent colours. You can use the pattern as your colour palette picking out different colours for walls, upholstery and curtains.

Think in threes

Three is a bit of a magic number when pulling a scheme together with the hero colour being around 60-70% of the scheme (think walls, floors or large pieces of furniture) then the secondary colour being around 20-30% (for example soft furnishings) with the final accent colour around 10-5% (that's cushions, artwork and vases). You can add neutrals in with this, and these can be found in wood flooring and furniture for example.

Create a mood board

Before stocking up on paint, compile a mood board. You can start on Pinterest, but don't plan everything online. Get some colour cards from the hardware or paint store because they can look completely different on the Internet, and remember that colours form relationships with other colours, so it is important to print pictures of your rug, couch and so on, put them all on one sheet of paper with the colour cards and make sure they sit nicely together – that's where the skill is.

Just do it

Do not worry about what other people will think of your interiors. It is impossible for everyone to like everything you do because we all have different tastes. Do what you want in your own house and enjoy it. You'll only be disappointed if you don't!

Professional mixing



Efficient and reliable mixing is the ideal basis for processing paint, plaster and filler. The importance of correctly mixing materials in powder form is often underestimated. Philipp Stahl, master painter and application engineer at Festool, describes why this process in particular is so crucial. The combination of stirrer and stirring rod also plays an important role in mixing and stirring and needs to be tailored to the relevant material on a case-by-case basis.

Painters encounter a multitude of different materials in their everyday life: various types of plaster, filler, paint, wallpaper paste, clear coat, reinforcement adhesive, varnish and two-component coating systems. As a rule, these materials each require a different choice of stirring rod. In everyday work, painters often use the same stirring rod for different materials. The result is that the materials are often mixed incorrectly. This could lead to the need for rework, additional costs or even the formation of structural damage. What is particularly aggravating is that the material manufacturer's warranty could also be rendered void due to incorrect application. For the painter, this usually ends in substantial follow-up costs and potential compensation demands from the end customer. This risk can be easily avoided by simply using the correct

stirrer, stirring rod and settings in accordance with material manufacturer specifications.

Of paramount importance: Surface preparation

During mixing, it is especially important to ensure that the quantities and proportion of components A and B are carefully and accurately balanced, that the timings specified by the manufacturer are kept to and that the components are mixed properly. If this is not the case, damaged areas may form on the coating and adhesion issues with the underlying surface may crop up. During mixing, it is recommended to peruse the component manufacturer specifications on the designated data sheets and to keep exactly to the specified quantity proportions and mixing speed. "If the components are mixed at too high a speed, the mixture heats up faster. This means the material sets too quickly, impairing adhesion with the underlying surface and reducing the processing time," explains master painter Stahl. He continues: "When using liquid resins, we recommend a so-called disc stirrer which ensures that the two components are mixed in the ideal way."

Firm filler and plaster for walls

"In order to mix viscous reinforcement materials and plaster, we recommend using a stirring rod that is spiralled to the right and which mixes the material from the bottom to the top. This ensures that all the material is mixed evenly," describes Stahl. In order to agitate clear coats, dispersion adhesives, wallpaper paste or thin materials, the application engineer recommends using a stirring rod that is spiralled to the left and mixes the material from top to bottom.

It's all down to the perfect stirrer

For the vast majority of mixing materials, both in liquid and solid form, Festool recommends a stirrer with at least 1200 W and two-gear transmission with variable speed settings for mixing lightweight and medium materials. "In addition, thanks to the patented ErgoFix height adjustment feature, our stirrers can be individually adapted to the height of the operator. This makes a natural, upright and effortless working position possible. At the same time, the ErgoFix adapter, with its classic M14 tool reception, makes it possible to quickly change stirring rods (FastFix

function) without the need for tools," Stahl adds.

Heavy, compact materials should be stirred in first gear since the high torque means that the maximum stirring force is readily available. Meanwhile, liquid materials should be stirred in second gear at the appropriate speed (see manufacturer specifications). If the wattage of the available stirrer is too low, it requires a lot more effort to mix the material perfectly since the missing power often has to be compensated for with physical input.

Correct mixing enables painters to achieve the desired working result as well as avoid unnecessary hassle and the consequent expensive rework.



- Before acquiring a professional mixing system, think about what requirements you encounter in your work and which materials you generally need to mix.
- Match the suitable stirring rod to each application/material.
- Observe manufacturer specifications.
- Adapt the speed as required and keep to specified mixing times.

Five easy paint projects to introduce colour into your home

Walls

If you're worried about painting a whole room, you can start with just a single wall or a section. A wall painted with either a complementary colour, or radically different (think a dark navy blue wall where the others are white), offers a pleasing focal point. Painting just one wall in the room allows you to repaint and change the feel of the room quickly and inexpensively.

Furniture

Even if the colour choices you make for your walls are more neutral, think about adding colour by painting some furniture. It's a quick and easy way to

add colour to your home and, as with all painting, it's easy to change if you do decide that it's time for another look.

Secret spaces

Another great way of introducing colour, especially if you like to make safe design choices, is by painting the inside of your cupboards! Adding an almost secret splash of colour is a fantastic way of adding a bit of personality to your home without it being permanently on show. It's also a great way to get used to introducing colour. Think of it as a test area, and if you like it, you can start to think of other places to introduce more colour.

Tiles

This one is admittedly not for everyone and it's more of a quick fix than a permanent solution, but painting your tiles can be a great way to freshen up your bathroom (or kitchen) especially if you've inherited something you don't like.

Doors

Often, walls and ceiling are painted with a neutral colour. How about painting your doors and doorframes to really make a room stand out? Painting your front door is also a great way to make a statement.



Wooden stars are simple, quick and inexpensive to make. Clifford Roberts and woodworker Andries Eygelaar show how to do it.

A STAR IS BORN

Project guide

Cost: Less than R50

Skill level: Easy

Time: Around two hours

What you'll need

- 10 scrap timber strips, 75 x 30 x 8mm
- Table saw with a grinding surface
- Rubberised clamp
- Drawing compass and pencil
- Tape measure
- Contact glue
- Sandpaper
- Two scrap timber blocks to make a jig
- G-clamps

It's soon time to dig out the old Christmas tree again. Why not change things up a little this year and make your own star for the top? But that's not all this nifty woodwork project is good for; you can use a wooden star as a picture frame, a gift or just as a décor item for the mantelpiece, which was our mission.

The wooden star is quick and inexpensive to make once you're set up, but it involves some tricky angles. You get to hone your skills in creating and working to an accurate design, and if you have kids, the project is simple enough as a teaching aid.

Step-by-step guide

Step 1:

As with every new project, start with a drawing. In this case, the many sharp angles that come into play and the symmetry that is required to ensure perfect joins make an accurate plan essential. The size of the star can be whatever you prefer. Our five-point stars measure some 180mm in diameter – about the size of an adult hand – so we were able to use a standard compass. Bigger stars may need a different set of tools.

If you're following our process, use the compass to draw two circles – one about midway inside the other. Plot your five star-points on the outer circle followed by the five inner points between them on the inside circle. These points on the circles must all be equidistant.

Use a ruler to draw in the star shape that you will make, tracing the inner and outer edge of the wooden strips you plan to use. In our case, the strips were 8mm thick. Ultimately, you'll be laying the construction elements on the drawing as you get going to check your accuracy.

Step 2:

Assemble your timber. We used scrap pieces of SA Pine and cut them to the required size of 10 pieces measuring 75 x 30 x 8mm. If you sand them a little now, it makes the job a little neater and easier as you go along.

Step 3:

An important part of the project and the key to making joins that fit perfectly, is the use of jigs. You'll need two and they are very easily made. The jig is simply another piece of scrap wood that serves to hold your timber in position when it is being cut and ground. It ensures that the same angle is consistently cut on every strip.

Transfer the angle you need to cut by tracing it from your drawing onto a scrap block. You'll notice that there are two different angles that emerge –

one at the outer rim, where the points are formed, and one along the inner joins. That's why you need two different jigs. Refer to the photographs to get an idea of how it should look.

Step 4:

Start cutting all the outer angles by fixing your jig in place on your set-up; we used G-clamps for this purpose. Our table saw is an older model and requires considerable caution to operate safely. Make sure you follow the safety instructions and keep your fingers well clear of any cutting blades during operation.

Step 5:

Before you begin to cut the angles of the inner circle, you must first glue the outer joins together. When doing this, make sure you check your progress on the plan with each join. As a symmetrical design, all points must meet up to achieve the required objective. We found the easiest way to cement these joins is to use contact glue as opposed to traditional cold wood glue, which tends to cause the angles to slide. Follow the glue's packaging instructions. We also found the use of a rubberised clamp very handy to pinch the join until it is set.

Step 6:

Once the joins are ready, make the second jig if you haven't done so already. Lock it in place to allow the v-shaped component of the star you've just completed, to be machined along a grinding surface. You'll note that very little wood needs to be removed to achieve the desired angle, hence our preference for the grinding surface over the saw.

Grind all your angles and then lay them on your plan. Some minor adjustments may be necessary, depending on the accuracy of your production and design.

Step 7:

Glue the remaining joins in place and allow to dry sufficiently before sanding all surfaces and edges smooth. At this point, you may want to add a hardboard backing that's cut to size and shape,

and fixed in place. If you want it for Christmas, you may need to dig out that tree sooner rather than later to investigate how to affix the star. Drilling a hole in the centre join so that it slips over the topmost branch may be one way of doing it. For our purpose, we left ours as is.

Step 8:

Paint the star as desired. Spray-paint makes the job quicker; plus, it's easier to reach the inside angles than using a brush. Set aside to dry before putting it on display. Make sure they're out of sight – you don't want to spoil the surprise!



Everything starts with an accurate plan



Strips of scrap wood can be used to produce the components of the star



Use a jig to make consistent angles. Our machine required extra caution to operate safely



Use a second jig to grind the inside angles



The rubberised clamp helps to fix the joins once glued



Constantly check your progress against the plan



Your finished star will make a star of you

How to hang WALLPAPER

Wallpaper adds a stunning finish to the walls of any room, whether it's a bold, colourful patterned paper or a subtle, neutral wallpaper.

Hanging wallpaper isn't as complicated as it might seem thanks to new techniques

With wallpaper comes the flexibility of papering a whole room or individual features. The extensive range of wallpaper available offers a variety of colours, patterns and textures to choose from; popular styles include floral, geometric, art deco, metallic, natural and vintage.

Hanging wallpaper isn't as complicated as it might seem thanks to new techniques like 'paste the wall'

wallpaper. This has been made simpler because there's no need to apply the paste to the wallpaper, fold it and let it soak in before hanging it. With 'paste the wall' wallpaper, there's no need for a pasting table, which means you might be able to save up to 30% of your time compared to traditional wallpaper hanging methods.

Before you begin

There are some tasks that you may need

What you will need

- Wallpaper
- Wallpaper paste
- Pasting brush
- Wallpaper smoother
- Snap off knife
- Scissors
- Ruler
- Spirit level
- Soft steam roller
- Stepladder
- Dust sheet

Safety first

- Keep adhesives, chemicals and scissors out of reach of children.
- Always ensure good ventilation during application and drying of wallpaper adhesives.
- If hanging wallpaper around a stairwell, get someone to help you as you'll be working at height with heavy lengths of wallpaper.

to do before hanging your wallpaper. Check our list to ensure your walls are fully ready for wallpaper.

Have you removed any existing wallpaper?

Doing this will give you a smooth finish and avoid air bubbles and creases appearing when you hang the new wallpaper.

Are your walls freshly plastered?

If so, have you sealed them with wall

sealer? Applying wall sealer seals the porous surface of the wall and improves the adhesion of the wallpaper paste. It also aids the slide of the wallpaper, useful when you are matching patterns or hanging it in awkward areas such as window recesses.

Have you lined the walls with lining paper?

Hanging lining paper prevents the new wallpaper from shrinking when it's hung, which leads to gaps between the lengths of paper. You may also want to hang lining paper if your walls have any stains or small imperfections in the surface, as it will help to disguise this.

Do you have enough wallpaper?

Online Wallpaper Calculators help to estimate the amount of wallpaper you'll need for your project. When you measure the height and length of the walls you want to wallpaper, also measure the windows and doors – the calculator will do the calculations for you. Allow extra for wastage – 10% extra is recommended – and often, any unopened rolls can be returned to the store you purchased the wallpaper from.

Are all the rolls of wallpaper the same batch number?

Make sure all the rolls have the same batch number printed on the label, as the colours, and in some instances, the finish, can vary between batches.

Have you planned how you're going to hang the wallpaper?

It is recommended that you hang wallpaper vertically unless the pattern requires it to be hung horizontally. If hanging over lining paper, hanging it in the opposite direction to the lining paper means that the seams won't fall in the same place and create ridges.

Do you have any fixings on the walls?

If so, unscrew the fixings before papering, leaving the wall plugs in place. Mark the position of each one by pushing a matchstick (with the head broken off) into the plug. Leave it slightly proud so you can find the hole and reuse it later.



Step-by-step guide

Step 1: The walls must be clean, dry, straight and smooth. If you're wallpapering on plaster, plasterboard or wood, apply a universal primer the day before so the wall can get a good grip of the wallpaper. If your walls are covered with gloss or silk paint, sand them down and then apply a universal primer. If instead they're covered with matt paint, wash them with a cleaning product that contains baking soda and let the walls dry for 24 hours before wallpapering.

Step 2: Now's the time to prepare your paste (adhesive) if it isn't ready mixed. Refer to the manufacturer's instructions.

Step 3: Use a spirit level to trace a vertical line 50cm from the corner of the wall (if your roll measures 53cm in width). This makes sure that you start wallpapering from a perfectly straight hanging mark and the remaining 3cm will allow you to avoid imperfect corner junctions (if the corner is not straight) which you can focus on once you've finished wallpapering the whole wall.

Step 4: With a pasting brush or a roller, start applying the wallpaper paste on the wall in a thin, even layer, from the vertical line you've just traced onwards, starting at the top and working your way down across the width of a roll. Use a stepladder to reach the ceiling.

Step 5: Place the wallpaper roll on the floor, align it to the vertical line and start unrolling it up to the top of the wall; keep 2-3cm on the ceiling to allow for a straight cut.

Step 6: Carefully position the wallpaper against the wall and double check the strip's alignment against the vertical mark. Once you're happy this is straight, use a wallpaper smoother to smooth it from the centre to the edges to smooth out any air bubbles and wrinkles. 'Paste the wall' wallpaper is easy to reposition: If the strip is not positioned as you want it, slowly take it off and reposition it.

Step 7: Trim any excess paper on the top and bottom with a snap off knife and a ruler, flatten out the seams with a seam roller and then repeat for the rest of the wall, making sure the seams line up each time.

Step 8: To wallpaper around any switches or sockets, cover these with the wallpaper strip and use the snap off knife to cut around them.

Step 9: To wallpaper around doors and windows, cover the openings with the wallpaper strip, mark the angle with your finger and use the scissors to cut the excess paper. Be mindful of leaving some extra centimetres on the window or door case. Cut the wallpaper at a 45° angle at the mark left by your finger. Smooth it out with the wallpaper smoother and cut the excess paper with the snap off knife.



If you want to create a feature wall and choose to wallpaper only one wall or corner, align the last strip you will hang next to the one already on the wall, smooth it out and gently follow the corner line to cut the excess paper. If you're wallpapering an angle, gently recreate the corner line with the wallpaper smoother and glue the wallpaper to the wall, then continue to cover the wall with wallpaper.

Wallpapering uncommon areas

Kitchen

When planning a kitchen refresh, most of us would reach for a paint roller and a tin of wall paint or tile paint, but why not consider kitchen wallpaper instead? With so many durable designs to choose from, washable kitchen wallpaper will instantly transform the heart of the home. Try teaming fresh, white kitchen paint with an on-trend floral or geo design for a splash of colour. Or green kitchen paint with tile-effect kitchen wallpaper to capture that country kitchen look (just don't forget the wallpaper paste!)

If your kitchen is prone to moisture build ups, standard wallpaper could be susceptible to peeling and damage. Many modern kitchen wallpapers are washable, which means that the paper surface is splash proof and, therefore,

will repel a sufficient amount of water making it suitable for rooms such as kitchen, where moisture is to be expected.

Bathrooms

Wallpaper for bathrooms? It doesn't sound like the greatest idea but many wallpaper suppliers have large selections of bathroom wallpaper designs which could be the next best thing to tiles and a lot cheaper. Aside from the splash proof and washable nature of many of the wallpapers, the designs are also very eye-catching. From pastel tones to more elaborate patterns, or white paintable designs, a plentiful choice to lighten and brighten your bathroom is available. Square patterns, geometric repeats and simple tile shapes – there are just so many choices now. So if you don't want to

commit to the real thing then there are many different types of tile design.

Ceilings

Wallpaper is used to make a statement and one of the recent wallpaper trends takes this to the extreme. Have you heard of the 5th wall? This refers to the ceiling. Ceiling wallpaper is just one way to create a visually striking space, one that will stand out among the crowd. What makes ceiling wallpaper such a unique trend? It's the fact that it brings in the 'other' wall in the space to create a more unified look. Choosing the right ceiling wallpaper is similar to choosing a design for a feature wall. Of note recently is 3D wallpaper, which, especially for kid's rooms, is proving very popular. Paired with a crisp white or grey wall, a vibrant ceiling wallpaper really makes a room come to life.



From pastel tones to more elaborate patterns, or white paintable designs, a plentiful choice to lighten and brighten your bathroom is available

Wallpaper trends to keep an eye on

Whether you fancy taking it dark and dramatic with black patterned wallpaper or want to inject some sparkle with shimmering metallic options, here are some of the top wallpaper trends for the coming year:

Blush pink wallpaper

Pink has been making an impression for the past couple of years, albeit in slightly differing shades. While last year was all about millennial and salmon pinks, now things are looking a little more blush.

Blush pink is the ideal shade for the home; it is unique without being overpowering and manages to effortlessly combine subtle and statement elements.

Rich navy wallpaper

Navy blue is the colour of the moment when it comes to home decor, with navy blue walls seeing a huge surge in popularity over the last year. Elegant, unique and beautiful navy blue walls are perfect for creating a cosy vibe in the bedroom, dining room or living room. To stop the room from feeling too dark or cold, pair your blue wallpaper with gold or warm wooden accents to help bring depth.

Sophisticated shimmer wallpaper

Perhaps you're looking for something with a lighter, brighter effect? Metallic wallpapers are another trend set to remain huge throughout the next year. A subtle shimmer wallpaper is both glamorous and sophisticated while bringing an ultra-modern, ultra-fashionable vibe into any room in the house. Choose a patterned metallic wallpaper to create a feature wall in your hallway that is sure to wow guests from the moment they enter.

Botanical print wallpaper

With many opting for plants to bring the botanical theme into their home, why not go one step further with botanical wallpaper? Green and leaf wallpaper prints are ideal for bringing a breath of fresh air to a space. Choose a palm tree, jungle or tropical print to inject colour and make a bold statement

Hexagons

Move over squares, circles, triangles, and diamonds – this is the year of the hexagon. From residential wallpaper to digital prints, we know we'll be seeing a lot more hexagonal designs showing up. Some wallpaper styles use hexagons as a

frame, giving it a flatter 2D appearance, while others play with perspective to create a 3D look.



With many opting for plants to bring the botanical theme into their home, why not go one step further with botanical wallpaper?



With so many durable designs to choose from, washable kitchen wallpaper will instantly transform the heart of the home

SALESPERSON WANTED

Unique opportunity for right individual - write your own salary.

Are you self motivated? Can you close a deal?

Do you have your own transport?

Then call Wilma on 065-849-3264 during office hours.

We offer an office allowance and commission



With Christmas fast approaching, why not use your metalworking skills to make gifts for the family?

>> André Gous

DIY Christmas gifts

Project guide

Difficulty: Easy

Estimated cost: ½ Hour

Estimated time: Under R100 each

Materials

- 1m x 6mm Round bar
- 90mm pole cap
- 50mm flat disk
- Wine bottle

Tools

- Hack saw
- Aerosol spray paint
- Tape measure
- Chalk
- Vice or bender
- Welder
- Grinder



Step-by-step guide

Step 1: Start by cutting the following:

- 1 x 250mm of 6mm roundbar – first arm to support the bottle wine
- 1 x 200mm of 6mm roundbar – body
- 1 x 120mm of 6mm roundbar – second arm
- 2 x 130mm of 6mm roundbar – legs

Step 2: Next bend one of the two legs 45° in a vice and keep the second leg straight and weld the two legs onto the body (200mm roundbar).

Step 3: Weld the legs and body section onto the 90mm round cap (base plate).

Step 4: Next bend the first arm: bend the 250mm roundbar around the wine bottle to ensure a snug fit and weld onto the body. Position where most secure.

Step 5: The second arm which is the 120mm roundbar needs to fit underneath the wine bottle in order to hold the bottle in place. Bend 30mm at a 150° bend. Weld the second arm on as well and then finally the 50mm flat disk for the head. Grind all the welding spots neatly and spray. This little project is perfect for all your clients/men in your family during the holiday season.



Cut all the materials



Bend the roundbar around the wine bottle



Bend one leg 45°



250mm bend on the first arm



Measure the leg width to fit the base



Positioning the first arm



Weld the second arm in place



Weld in place



The project before spraying



Adjustable jewellery stands

Project guide

Difficulty: Very easy

Estimated cost: ½ Hour

Estimated time: Under R100

Materials

- Small piece of wood (230mm x 150mm)
- 1 830mm of 4mm/6mm roundbar/stainless
- Sanding paper
- Wood oil
- Spray paint

Tools

- Hack saw
- Tape measure
- Chalk
- Drill and 4mm drill bit

Step-by-step guide

Step 1: Use the tape measure and measure four equal marks with pencil or chalk on either end of the wooden block (on the width side) and draw a line; I started 20mm from the edge. Use the 4mm drill bit if 4mm roundbar is being used and make eight pilot holes (four on each side) and use a 6mm drill bit for 6mm round bar. Also determine the middle of wooden block and drill one pilot hole to make the arm adjustable should you wish.

Step 2: Cut the following lengths with the hack saw:

- 1 x 540mm of 4mm round bar
- 2 x 400mm of 4mm round bar
- 1 x 300mm of 4mm round bar

Step 3: Let's bend. Determine the centre of the 540mm round bar and mark with chalk. Measure 80mm from centre mark outwards and mark with

chalk. Bend 90° on both ends, making sure the bends line up with the holes.

Step 4: Bend the 400mm round bar by measuring 200mm out and bend 90° to create an elbow.

Step 5: Determine the middle of the 300mm round bar and bend another 90° bend for another elbow.

Step 6: Bend the second 400mm length round bar as in step 3.

Step 7: Spray and let dry, and then you will have the perfect gift for the woman in your life.



1



We made two different versions of this project

2



Measure for the pilot holes

3



Drill the pilot holes

4



Determine the centre of the round bar

5



Bend 90° on both ends

6



Make sure the bends line up with the holes

7



The four bending sizes

8



Spray the arms

"You are a welder if you have sun burn in the winter." – Walter





TOY TRUCK

Project guide

Difficulty: Easy
Estimated cost: 2-3 hours
Estimated time: R150

Tools

- Grinder or hack saw
- Tape measure
- Square
- Welding machine/bolts
- Clamp

Materials

- 1 x 150mm of 75mm x 75mm square tubing
- 1 x 850mm of 25mm angle iron
- 1 x 100mm of 25mm x 5mm flatbar
- 1 x 260mm of 6mm roundbar
- 4 x plastic wheels
- 4 x spring clips
- Off cut mesh
- 1 x Empty coffee tin
- 2 x 4mm bolts and nuts
- Spray paint

Step-by-step guide

Step 1: Cut one 50mm square tubing as well as one 100mm square tubing.

Step 2: Weld the two pieces together on top of each other to form a 'cab'.

Step 3: Cut two pieces of 350mm of 25 x 25mm angle iron and weld onto the cab bottom (100mm piece) to form a chassis.

Step 4: Cut one 75 x 75mm mesh by using the grinder and weld into place on the front of the truck. This will form the grill.

Step 5: Cut the front bumper: one 100mm of 25mm flatbar and bend 25 degrees on each end. Weld underneath the grill.

Step 6: Cut one 130mm of 25mm angle iron for the rear bumper. Determine the middle of the chassis and bumper and weld in place. Please note the overhang on either side; cut the overhang corners 45 degrees inwards.

Step 7: Cut two 130mm of 6mm round bar for the axles. Measure 60mm from the front of the chassis and make a mark with chalk. Weld the front axle in place. Next measure 100mm from the back of the truck's chassis and make another mark. Weld the rear axle in place.

Step 8: Drill two holes in the chassis of toy truck and on the bottom of coffee tin.

Step 9: Grind all the welding neatly and spray the coffee tin and truck.

Step 10: Bolt the coffee tin to the chassis of the truck once the paint is dry, and assemble the truck wheels with a spring clip. This is a perfect, robust gift for a little boy.



All the materials you'll need



Cut and weld the front bumper



Weld the square tubing on top of each other to form a 'cab'



Cut 130mm of 25mm angle iron for the rear bumper



Cut two pieces of angle to form a chassis



Two 130mm pieces of 6mm round bar are used for axles



Cut some mesh for the grill



Bolt the coffee tin to the chassis of the truck

ABOUT ANDRÉ:



After a period of unemployment, André turned his 20 year hobby into a business. He later suffered a setback when his tools were stolen but the tide turned when he won *The Home Handyman's* wine rack competition and became a regular contributor.



MYTHS ABOUT TIMBER CONSTRUCTION

While timber construction has a relatively small footprint in South Africa, with its host of environmental and performance benefits, the building material is enjoying increasing popularity and interest among the general public and trade alike.

Misconceptions about timber as a construction material are still commonplace, limiting potential users from enjoying the benefits of this unique, renewable building material. According to Dr. Brand Wessels, Chairperson of the Department of Forest and Wood Science at the University of Stellenbosch, the most common myths that circulate among the general public and even the professional trade about timber as a building material are: that using trees to manufacture products is not environmentally responsible; that wood structures are not as structurally safe and durable as steel and/or brick and mortar structures; and that wood structures are an obvious fire hazard.

Plantations, not natural forests

The notion that using trees to manufacture products is environmentally irresponsible is related to perceptions around deforestation of natural forests. "There is a distinct difference between harvesting timber from sustainable and well-managed plantations and the deforestation and degradation of natural forests that should be protected. In South Africa, we use timber grown in responsibly managed plantations, which are like working factories with the sole purpose of growing timber in a controlled environment for the market. Managed by reputable bodies like the Forest Stewardship Council (FSC), these plantations are operated in line with the highest standards for ensuring sustainability," says Dr. Wessels.

Dr. Phillip Crafford et al., recently published their findings on the role that timber can play in reducing the environmental footprint of the built environment. The study, titled *The potential of South African timber products*

to reduce the environmental impact of buildings, compares several roof truss systems of varying materials using a simplified Life Cycle Assessment (LCA) approach. The study concludes that the timber roof truss systems showed a lower environmental impact across the board and "demonstrates the potential advantage of using local timber products to reduce the environmental impact of the truss and building industry in South Africa."

Strength and durability

Contrary to the misconception that timber structures are not structurally safe and durable, timber has a higher strength-to-weight ratio than either steel or brick and mortar. "This misconception may be linked to perceptions around low-cost, poorly built informal housing of wood," says Dr. Wessels, adding, "To the contrary, in some applications, such as for housing in earthquake-prone areas, wood is preferred above other materials. There are structures that are 1200 years old in Japan (an earthquake-prone country), which attest to the material's

durability and strength. As with any other material, a well-designed and built wood structure will last a lifetime; conversely, a poorly designed and built structure – of any material – will not endure.”

According to Amanda Obbes, General Manager of the Institute for Timber Construction South Africa (ITC-SA), timber frame construction is a standard construction methodology under the National Building Regulations (NBR), which provide the necessary building codes for the manufacture and construction of safe, legal and durable structures that are built to standard.

Timber under fire conditions

According to the ITC-SA, structural timber for roofing is both commonplace and performs well under fire conditions. As with every aspect of building, timber roof trusses must be manufactured and erected in line with the National Building Regulations and SANS 10400, which provide for fire safety. Building regulations, set in place by bodies such as the South African Bureau of Standards (SABS) after extensive research and consultation with industry experts, consider all aspects of a given building material’s composition and properties to ensure that it meets the same safety and performance standard as any other building material in the same application.

Dr. Wessels notes that the misconception of wood being a fire hazard is a complex issue with roots in the informal housing market and our use of wood as fuel for fires. Used in small dimensions, not built to code and surrounded by and containing other potential fire hazards, such as is the case with many informal houses, this type of structure should of course be considered a hazard to human life and unfit for habitation. “But formal housing structures and even multi-storey wood structures can perform as well as any other material would under fire conditions,” says Dr. Wessels. In some cases, such as wood beams with large dimensions, wood will even outperform competing materials, like steel, due to its slow charring rate in fires.

Setting the record straight a matter of urgency

Rising carbon emissions, our newly ‘upgraded’ climate emergency, environmentally savvy consumers and governments looking to make better-informed decisions about the environment form part of a collective global call for materials and methodologies that will respond with agility to an environmentally conscious future.

According to Werner Slabbert, Director of Eco Log Homes, “Local government is facing unprecedented pressure to make important climate change-related decisions. According to a recent report by the World Meteorological Organisation, the past four years were the warmest on record and extreme weather impacted lives and sustainable development on every continent. Formulating ways to develop cities and communities in an environmentally responsible way that also integrates adaptation for climate change is now of the highest importance,” he says.

“Timber frame construction, with the research to back it, responds exceptionally well to these pain points in our environmental and political climate,” says Dr. Wessels. “Leveraging the environmental benefits of wood, including carbon sequestration, oxygen production, lower transportation emissions, faster construction time and a much-reduced HVAC burden, is becoming increasingly crucial in the light of accelerated climate change, making it imperative to lay to rest these common misconceptions about timber construction,” he adds.

Consumers today have more information available to them than ever before, but with it comes an ever-increasing need to engage with it responsibly and critically. Likewise, industry has a duty to share information in a responsible and ethical manner, not only to protect their reputation, but to safeguard the consumer.



Recent studies show that tree planting and forest restoration are the most cost-effective strategies with the greatest potential of combatting global climate change.

“Unfortunately, consumers are often on the receiving end of dubious information from organisations with commercial interests in products, and it is becoming more important that independent bodies, like universities, standards organisations and research organisations verify claims, especially those pertaining to the environment,” Dr. Wessels notes. “Methodologies such as Life Cycle Assessments have developed to a point where very comprehensive comparisons can be made between materials, products and processes to verify their environmental impact. Consumers need to be wary of claims made by anyone with commercial interest in products unless these claims can be supported by independent evaluations; it is the consumer’s right to request this evidence, especially when they are using this information to inform big investments, like new builds, retrofits and renovations,” he adds.

“While common misconceptions about timber construction play a role in preventing both the consumer and the trade from harnessing its manifold benefits in the construction arena, there are positive signs that the general public and the trade are showing increasing confidence in the material,” he says.



Timber has a higher strength-to-weight ratio than either steel or brick and mortar

Resource

For more information, visit www.itc-sa.org or call 011-974-1061

Begonias are ideal to brighten up those dull areas in the garden

Getting colour in your garden

Colour in the garden can still be achieved during a drought as long as you don't plant more than you can water.

If you are staying at home over the coming months and expecting guests over Christmas, you can certainly plant some summer seedlings to brighten up your garden. If you are going away, mulch your beds and let them rest. To keep flowering annuals blooming and looking good, they should be watered more often than shrubs; those growing in containers may need extra watering.

At this time of the year choose 'instant colour' flower seedlings which are reasonably well developed. Identify a few spots in the garden where a splash of colour will draw the eye, or plant up a few cheerful containers, placing them where they will be most appreciated by your guests. The garden centres stock up on tough seedlings during a dry season and can advise you on the best water-wise selection for your region and garden, whether it's in sun or shade. Water-wise perennials which flower in summer are also a great way

to introduce colour into your garden. Perennials will provide colour this season and even more next season, saving you in the long run. If you want a peaceful and pleasant end result, do not overdo colours in your garden, and stick to a simple colour scheme.

Hailing from around the globe, including several indigenous varieties, Begonias come from a massive genus consisting of more than a thousand species. With over ten thousand documented hybrids there is an almost confusing array to choose from. When it comes to long lasting, outdoor colour, however, there is little to be confused about. Begonia semperflorens or bedding Begonias and its numerous cultivars, are just the thing to brighten up those dull areas in the garden. Impatiens, known to many as 'Busy Lizzies', are a vital ingredient to any summer garden. Few other plants offer such a mass of blooms for such a long period as these little plants. For a

relatively small outlay, a few trays of impatiens will transform a dull shady corner into a riot of gorgeous colour. Impatiens will perform beautifully all summer long, impressing all passers-by. Once impatiens are established, gardeners will find them among the most carefree annuals in the garden.

Begonia

One of the many advantages bedding Begonias have is that they are relatively maintenance free. They don't need deadheading and will provide colour from early spring right through to the end of May, especially if given a regular helping of seedling food. When planting in sunny position the seedlings need to be placed closer together (10cm apart) as the plants won't spread as much. If it is very hot, it is a good idea to mulch between the plants to keep the soil cool, although as the plants grow they will soon shade their own

roots. Many gardeners are under the misapprehension that either the green or bronze variety perform well in the sun. This is just a myth as both green and bronze varieties perform well in both sun and shade. In shade, Begonias grow a bit taller and spread further so space them 15cm apart when planting.

Impatiens

Impatiens prefer growing in a lightly or partially shaded position, but they will tolerate periods of full sun during the day – they do very well in morning sun positions. Impatiens can be used extensively around patios and pool areas, along driveways and at entrances, in shady beds under trees or in borders shaded by a wall, in-between shrubs and groundcovers. Window boxes, containers and hanging baskets make for excellent homes, especially for the compact varieties. These container plants can be brought indoors in high light conditions and then taken outside after a week to allow them to recover in natural light. In short, use impatiens where you want to add a feel of vibrant colour.



Blue sage looks stunning in a mass planted bed

Squashes

The squash family is diverse and loved by many for their varying tastes and colours, but their care is pretty similar across the varieties when growing in your garden. In general, squashes need wide spacing between seedlings unless you're growing the bush or trailing varieties, which is an option if space is limited. Well-drained soil that has been generously worked over with compost will go a long way to kick starting them properly. They do require a healthy amount of water so be sure to do so if nature isn't providing.

Salvia farinacea

Salvia farinacea has attractive bluish green leaves and deep blue flower spikes that would be an amazing sight gracing your containers all summer long, right up until the first frost in autumn. Blue sage also looks stunning in a mass planted bed but especially when used as a specimen plant on a patio. Though drought tolerant once established, it does prefer moist, but not water logged soil. Fortunately it is not prone to damage by snails and slugs and is fairly self-sufficient except in extreme weather conditions.

Tired of green in the shade?

Choose the right plant – Read up or enquire at your nursery which plants are suitable in the shade. While some plants will cope in the shade, they may not flower. Some plants that will flower well are: **Trees:** Halleria lucida. Magnolia species. **Shrubs:** Azaleas, Camellias, Viburnum sinensis (also makes a wonderful hedge), Hydrangea, Indigenous Mackaya bella, Plectranthus species and Ochna serrulata. **Perennials:** Clivia, scadoxus and Arum lilies. **Annuals:** Impatiens, Begonia and Primula.

Feed your plants well – Often plants growing in the shade are undernourished. If they are under a tree canopy, then they are competing for nutrients in the soil with the roots of the trees above. Add enriched compost two or three times a year. Fertilize with 5.1.5 every six to eight weeks. If you find your green growth is very lush but there are no flowers increase the ratio of Potassium. (3.1.5 Would then be better.) Remember to water well.

Thin tree branches to let in more light – Even shade loving plants may not flower well if the shade is very deep.

Use plants with colourful leaves – Colour is not only achieved by blooms! Variegated Dianella with lovely white stripes. Aucuba with green and mottled gold. Purple leaved Ajuga and lime green Asparagus densiflorus to name a few. Remember grouping and positioning will prevent shades of green from becoming boring. Use the height, colour and texture of plants to prevent plants from all looking the same.



What you need for containers:

- Good drainage: Make sure the water can leave the container, so make small holes at the bottom.
- Fill the container with potting soil.
- Add bone meal and organic fertilizer to the potting soil.

The 1,2,3 of how to plant a tree...

- 1: Dig a square hole one and a half times the size of the nursery bag.
- 2: Mix in two big handfuls of compost, one big handful of bone meal and a bit of soil into the bottom of the hole.
- 3: Take off the plastic bag and place the tree in the hole. (The soil level on the root ball should be level with the soil around the hole). Fill the hole with the remainder of the soil and stamp down to firm. Water well.



Space saver: plant fresh herbs in a shoe organiser and hang against the wall



Impatiens do very well in morning sun positions

Top tips for spring

Looking at a post winter garden one can feel quite overwhelmed on where to begin. The lawn is brown, the shrubs may be leggy and the perennials may look overgrown and dull. Here is a quick guide to get you going.

Annuals (Colour seedlings): Plant summer annuals now. Prepare the soil well. Keep them well watered and fed. Foliar feeding colour plants with a foliar fertilizer high in Potassium (K) will give you awesome blooms.

Bulbs: Prepare soil for summer flowering bulbs and plant e.g. gladioli and lilies. Continue to feed winter flowering bulbs until their leaves begin to die off. This will help them store food into the bulb for the next season.

Climbers: If you missed the winter pruning, prune now. Some climbers become so tangled and woody that they almost strangle themselves. Cut these types back severely to the main stem. Otherwise just shape and trim. Water and fertilize with 5.1.5.

Fruit trees: These should be blooming now. Keep them watered from the base while they are setting fruit. Fertilize with 5.1.5. Watch out for fruit development and spray for fruit flies to prevent worms. Cover with bird netting. It is a good time to plant new fruit trees.

General garden: Remove weeds from beds, paving, driveways and pathways. Composting everything now is a good idea. Water where necessary especially after hot, windy days. Cut back on watering when the rain begins. Prepare



Speak to your nursery to ensure you have a water-wise garden

the soil for new plants by adding compost, kraal manure and bone meal and digging it into the root zone. If the smell of kraal manure puts you off, use an organic fertilizer.

Ground covers: Frosted off, leggy ground covers should be cut back now (like *Plectranthus*). Feed with 5.1.5 and compost. Water to encourage new growth.

Lawns: Cut your lawn very short to remove dead grass and thatch. Aerate hard and compacted areas with a fork or a spiked roller. Feed with 2.3.2. Apply lawn dressing now; this can be fine compost, or a lawn dressing with topsoil to help even out an uneven lawn. Always water well after fertilizer application.

Perennials: Agapanthus, Day lilies, Wild Garlic and deities, to name a few, get thick and overgrown and the soil gets tired too. They should be lifted, split and replanted into freshly nourished soil. Always keep transplanted plants moist while they are setting new roots.

Pots: When plants get older in pots they can become pot-bound and lose their vigour. Gently remove the plant from the pot. Loosen the roots and trim some off if they are very thick. Remove the soil and bring in fresh potting soil. Add compost, kraal manure and bone meal and mix in well. Replant the plant and water well.

Roses: Prune roses if you have not done so. Do not spray lime sulphur if there are new shoots, as it will damage them. Feed with 5.1.5 and compost each bush. Look out for aphids. A jet of water can remove them or begin your spray program. Look out for organic insecticide which is less harmful to the environment.

Trees and shrubs: Prune winter flowering shrubs. Prune leggy shrubs like fuchsias to encourage bushy growth. Cut dead flowers off hydrangeas. Shape young trees and shrubs and remove any dead wood. Begin fertilizing flowering shrubs with 5.1.5 and 3.2.1 for leafy shrubs and hedges. Add acid compost to Hydrangeas (blue), Azaleas and Camellias. Water Azaleas and Camellias

well while they are in bloom but avoid getting water on the flowers.

Vegetables: It's time to get your veggie garden going. Prepare the soil well and plant up new seedlings and seeds. Cover young plants with bird netting as the birds are looking for fresh new leaves! (They are still hungry from winter shortages).

Focus on achieving a beautiful lawn

The food producing part of your lawn is in the grass blade, and if you set your mower blade too low you run the risk of damaging the plant. This can cause your lawn to turn brown, restricts root growth and may run the risk of weed and disease problems.

- Lawn in the shade, especially, needs to be mown high.
- It is important to keep your mower blade sharp. A dull, rough blade will damage the plant leaf and cause browning in lawns. Have your blade sharpened several times a year.
- Adjust your cutting height. Remember, as temperatures rise, so should your mowing height. Early spring mowing can be lower to 'clean up' from the previous winter. Then increase the height again.
- Many gardeners use a trimmer for the edges of your lawn. If you notice your edges are dying back, it is most likely that the lawn is being cut too low and becoming exhausted.

Watering

- Always water after fertilizing.
- General watering can be done as little as once a week. Do a deep watering to

encourage roots to go down deeper. Shallow watering encourages lazy roots.

- In times of drought spread a layer of compost over the lawn to keep in moisture and protect the roots. It may turn brown on top but will turn green again as soon as the rain returns.
- It's best to water your lawn in the early morning, between 4-8am, while wind and evaporation losses are low. Night watering should be avoided if possible, because it increases the chance of disease problems in your lawn. Plants should be dry prior to nightfall to help prevent disease.

Feeding

- Top dress your lawn at least once a year.
- If your lawn is not even, make sure there is top soil mixed with compost to help even over the bumps.
- An even lawn just needs fine compost raked over it. This will help with aeration and drainage as well as help hold moisture in the soil.
- You can spread a thin layer of kraal manure or chicken manure as fertilizer over the lawn for instant green, but be sure it is well decomposed and water it in very well or the lawn will burn.
- Fertilize the lawn every six to eight weeks with a general lawn fertilizer for strong lawn. This is usually a fertilizer with a high nitrogen content, e.g. 5.1.1
- If the lawn is struggling to grow and it is a high traffic area, aerate the root zone by pushing in a garden fork or on big areas hire a spiked roller. Follow this with a fertilizer application with phosphate for the roots, like 2.3.2 then top dress with compost and water well.



A dull, rough lawn mower blade will damage the plant leaf and cause browning in lawns

Securing your home

Secure your property and belongings by following these simple security ideas

A heavily fortified perimeter wall with steel spikes and electric fencing

>> Warren Schmidt

Electric fencing

Although electric fencing can be installed by the competent DIYer, this should be left to reputable experts as a Certificate of Compliance will need to be issued upon installation. All electric fences installed after 2012 and any new installation require a Certificate of Compliance. This falls under the Health and Safety Act of 1993 and in particular sections 12 (4) and 13 (1) of the Electric Machinery Regulations.



Electric fencing requires a Certificate of Compliance for new installations or when selling your property

Services of a security company

There are numerous security companies offering a wide range of services across the country. The advantage of having a security company is that they will often include a full security installation as part of the contract, particularly the alarm system. Some companies will offer security cameras and electric fencing at an additional cost. The disadvantage is that you might need to sign into a contract over a certain specified period. Do your homework and speak to friends and colleagues as they will often be the most reliable source of information regarding personal experiences with their own security companies.



A surveillance camera monitoring a gate

Home security is a very relevant topic today. We explore several ways in which you can protect your property and household items on a reasonable budget. The objective behind security is to create layered barriers making entry and access to your home and property difficult for intruders. At the same time, it should buy you critical time to call the security services. However, home security goes hand-in-hand with being alert to your surroundings. Even the best security system won't stop an armed robber if they catch you off guard.

The perimeter boundary

Your first line of defence against intrusion from the outside is the perimeter boundary of your property. High precast or brick walls were popular options in days gone by, but these are now being increasingly replaced by palisade fencing, or more recently, 'invisible' fencing options such as Clearvu and related products. The problem cited by security experts around tall solid walls is that once an intruder is inside the property, no one on the outside, such as neighbours, security or the police, can see what's happening inside and the intruders can operate at leisure. However, by installing a see-through option you are giving up your privacy and people on the outside can monitor your movements inside, so each option as its pros and cons.

Access points to your property should be kept to a minimum, such as having one access gate. However, some property owners opt for a pedestrian gate for ease of exit or entry. As an added feature to many properties, razor wire, spikes and electric fencing are included as extra deterrents against intrusion. Razor wire, barbed wire and spikes can look rather untidy, so electric fencing is an option more preferred by the homeowner.

Automated gates

Automated gates are popular and convenient, but much thought must go into the type and installation. What

happens when your electricity goes off? How long will the battery last? Do you have measures in place to prevent the gate from being lifted off the rails? How secure is the electric gate motor from theft, tampering or vandalism? Also be aware that carjackers and armed robbers will sometimes shove cable, steel rods, plastic or cloth between the rails or other parts of the gate to jam it when you return home.

Security cameras

DIY home security surveillance systems are becoming increasingly popular and accessible to homeowners. There are generally two main variants on the market – analogue and digital. The so-called 'plug-and-play' options are popular and affordable and available from most DIY retail outlets. The golden rule of security or surveillance cameras is that you get what you pay for. A cheap DIY kit may be tempting, but don't be alarmed when the unit packs up after six months of use or the resolution is so bad that you can't distinguish a bird from a cat.

High-end surveillance camera system usually come in combinations of 8s – such as 8, 16, 24 or 48 channel systems. Analogue cameras operate off a battery pack system and use co-axial communications cable. Digital cameras are usually activated by PoE (power over ethernet) in either a 12V or 24V system. In other words, the cameras are powered directly from a PoE switch or the NVR/DVR recorder. Cat 5e or Cat 6 data cable is the cable used for these digital cameras, but keep in mind each cable run from camera to the DVR should not be more than 80 metres, although you might get away with 100 – 120m. For a good quality professional 8 channel digital camera setup you can expect to pay anywhere between R16 000 to R24 000, but the system should produce high quality video and last between five to eight years. Remember, like any appliance or computer using electronics, surveillance systems will not last forever and will need to be upgraded.

Security tip!



Where possible, keep your gate area free from any obstructions such as unnecessary ornaments, trees, shrubs, bushes and other items that could conceal someone. The gate area should be well lit with bright lighting and these should ideally be charged off solar power so that in the event of a power outage, the lights will still shine bright. Always be alert to cars following you or people standing idly on the pavement or across the road. Pull adjacent to your property still on the road (if safe to do so) until the gate is open. Ideally, the gate motor settings should be set so that the gate closes swiftly as soon as you enter the property.



Burglar bars must be constructed from strong materials



A gate intercom can be a convenient method of communication to visitors but can also be subject to vandalism. In today's world of mobile phones, intercom systems should be confined to offices

An increasingly popular trend with homeowners is having their system connected online so they can view their cameras remotely. Provided you can connect to the Internet and your home system is connected, you can stream your videos from anywhere in the world. However, a very important point is to have your system encrypted or password protected. There are thousands of exposed cameras online accessible to web users, not to mention professional hackers, so make sure your privacy is not invaded. It is illegal to install surveillance cameras in bedrooms, bathrooms, toilets and showers. Likewise, security cameras should not be prying on your neighbours' activities or their midnight skinny-dipping sessions.

Surveillance cameras should adequately cover the outside perimeter of your house and main access points such as the gate. Opt for high-resolution cameras (4 megapixels and above) so that you can read number plates and pick up facial features. It does not help giving the police an image of a blurry face or someone that looks like the infamous big foot images in the woods! A good quality hard-drive will be required to record your footage and the settings configured with the date and time. Most modern cameras come equipped with infrared sensors and motion detection so that they record quality footage at night. Some security cameras can also be set with motion detection settings so that they only record when motion is detected.

Doors and windows

Burglar bars and security gates are effective barriers in keeping intruders out,



A wall-mounted monitor keeps an eye on the gate

but like any security product, you need to invest in quality products. One aspect to burglar bars and security gates is to ensure you and your family have a tried and tested escape plan in the event of a house or building fire. Tragically, each year, people die from smoke inhalation or burns when they are trapped behind security gates and burglar bars, so make sure all keys are accessible to all members of the family and that locks work flawlessly. Keep in mind that criminals will often use children to squeeze through small spaces in security gates and burglar bars in order to open the house from the inside. The range and design of modern security barriers is extensive and it's best for the homeowner to do some extensive research into the products available.

The roof

The roof is an overlooked but vulnerable access point to the home. If someone can easily climb onto the roof, then it's a simple matter of shifting a few roof tiles, and with some agility, squeezing into the roof cavity and opening the trap door. This is where alarm systems come in handy as they should detect any movement near the trap door. Some homeowners are fitting wire mesh inside their roofs to make it more difficult to gain entry, much to the consternation of a plumber who needs to replace a burst geyser!

Perimeter lighting

Motion sensor lights can be positioned in strategic spots around the house so that when someone approaches the house they switch on. However, these are often activated by dogs passing by



Analogue cameras are operated by a 12V power supply and co-axial communications cable

and if you have active dogs your house might look like a Christmas tree replica. In order to keep neighbourly goodwill, try position them so that the beam doesn't shine into your neighbour's bedroom. Alternatively, you can install lights that work off a day/night switch so that the lights switch on even if you're not home. Low voltage LED lights have evolved in leaps and bounds. As a result, you can select energy-efficient spotlights that use LED technology and will minimise your electrical consumption.

A last word on home automation

As we enter a world of high-speed fibre and internet connectivity, home automation products are on the rise. Welcome to the world of IoT – the Internet of Things. You can now control access to your property, switch on and off lights, turn on the geyser and even speak to your dog or cat even when you're on the other side of the world. You can also set your coffee machine to activate 20 minutes prior to your arrival home. Integrated security systems are evolving just as rapidly. Unfortunately, as tempting as this technology is, it also exposes the system to hacking, malware and other viruses, so make sure your system is firewall protected. Remember, criminals are also fast keeping pace with technology.



Many security cameras have infrared capability so that they can operate at night



A power supply used to power up security cameras



Boskoors Adventure Camp

8-14 December 2019

We at BosKoors are inviting all avid young anglers between the ages of 7-16 years to join us for loads of fun and adventure.

Venue: Boskoors Farm, 30km North of Pretoria on the Moloto Road.

Bookings are essential!

We have limited spots available as we like to keep the number of campers at a minimum, to ensure that every child gets the necessary individual attention and guidance.

Please call Wilma on 065 849 3264 or 083 306 2718 to book your spot. For more information visit www.sabass.com or e-mail wilma@sabass.com



HOW TO ~~FIX~~ AN INTERNAL ROOM DOOR

Repair rather than replace a damaged door



Project guide

- Difficulty: Moderate
- Estimated cost: R350 if you have none of the materials. If you do handyman jobs regularly, you should have most of the materials, except perhaps the enamel paint. Depending on the brand, it can cost about R195.
- Estimated time: Actual labour time – about 20 minutes, depending on the amount of damage to repair.
- Drying times: A few minutes for glue, 24 hours for wood filler – first covering and another 24 hours if any pocks/holes need filling and perfecting. A few hours per coat of enamel paint.

Tools

- Paint brush
- Paint scraper
- Screwdriver
- Pliers

Materials

- Sugar soap
- Soft cleaning cloth
- Medium to long screws or screw in cup hooks
- Wood filler – preferably white to match the door colour
- Enamel paint
- Mineral turps
- Sandpaper
- Quick drying wood glue

>> Kim Roberts

Sometimes that computer pushes you over the edge and your frustration spills over and instead of punching an expensive computer, the door gets the full fury of your pent up anger. The punch has left a depression in the door.

And now your wife is giving you the hairy eyeball and the kid's friends look at you a bit nervously. Get the door fixed and erase the reminder that you lost it with an inanimate object.

There are different types of internal doors, but the one we will be looking at repairing is a hollow core internal door which is normally painted with enamel.

Step-by-step guide

Step 1: Wipe the door clean with a soft cloth, using a sugar soap solution. Allow it to dry.

Step 2: Turn cup hooks or screws into a few positions within the sunken and damaged section. Use two or three, depending on the total area of the damage, to allow for even 'pull' zones.

Step 3: Apply glue with a brush, if there is no nozzle, to the opposing outer/inner edges before pulling outward gently by hand, or with some pliers. Pull evenly, steadily and firmly to bring the damaged piece back out to the same level as the rest of the door as best as possible. Hold in position for a short time until the glue has bonded. Quick drying glue is preferable for this to make your life easier. Carefully wipe the excess glue from edges. Allow to dry properly then remove the screws/cup hooks.

Step 4: Use a paint scraper to apply a matching colour of wood filler to bring the level of the damaged section to match the rest of the door surface, and to fill the holes left by the screws. Allow the wood filler to dry.

Sand and smooth the wood filler repaired areas. Apply more wood filler, if necessary, until the whole area is flush. Allow to dry and do a final sand.

Step 5: Wipe the area clean, and allow to dry properly.

Step 6: Paint with the appropriate colour enamel paint to finish the task. Two or three coats should be sufficient, less if a matching wood filler was used.

Alternative method

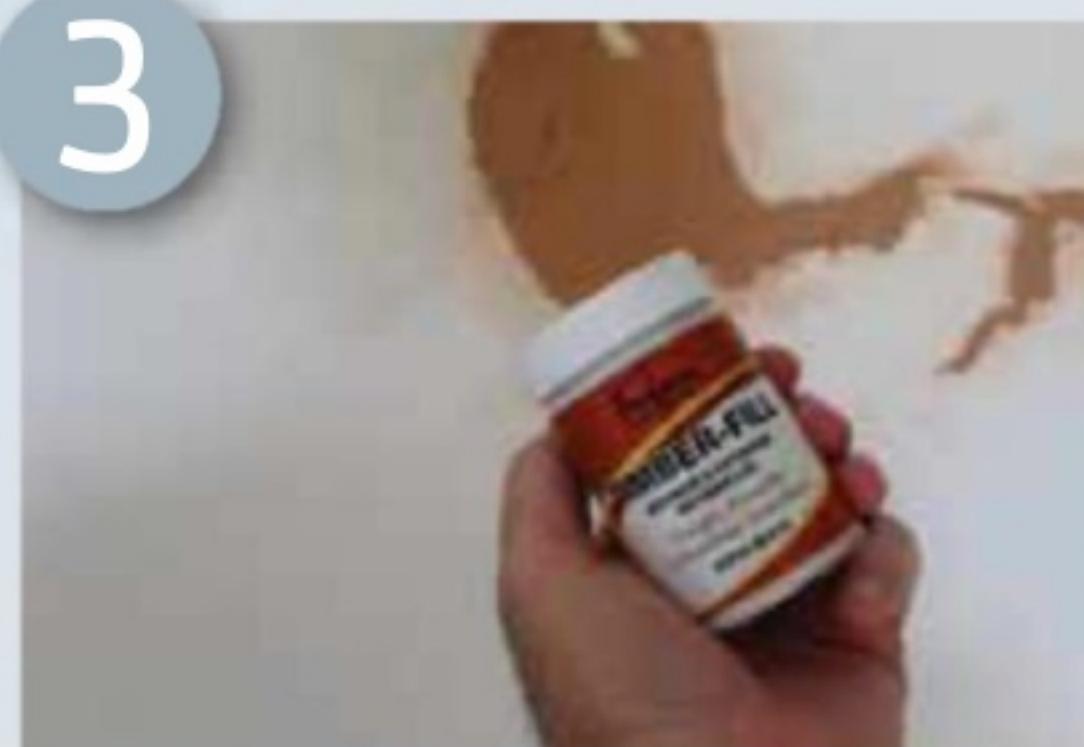
Cut out and remove the damaged section completely using a heavy duty utility knife. Keep the edges neat. Fill the hole with expanding foam, allowing it to overflow outward a bit. Give the foam time to dry as per instructions on the can. Shave or cut off the excess foam until it is flush with the door using a Stanley or craft knife. Cover over with wood filler. Sand and wipe clean, allow to dry and then paint with matching enamel.



1 Remove screws after pulling the section out



2 Use wood filler to level the repair



3 Use a matching wood filler



4 Sand smooth



5 Paint



Transporting wood boards is often a problem for most home woodworkers and DIY'ers.



How to get large boards home from the store

When you're picking materials for your DIY projects, one of the biggest challenges can be figuring out how to get it home. "Boards are long and can be heavy. Plywood is just plain unwieldy. Here are some techniques you can use to make it easier to get your materials home," says Greg de Villiers for Vermont Sales, the official agents for Kreg South Africa.

"First see if you can buy the materials in smaller sizes; plywood and other materials are available in smaller sizes in home centres. Stores commonly sell boards in 2,4m long and longer sizes. If you have a bakkie or a large SUV, hauling these boards may not be a

problem, but that's not the case with smaller vehicles," says de Villiers.

For most projects, you'll take those long boards home and cut them into shorter pieces. So, you might want to consider buying shorter boards instead. Many hardware centres sell commonly used boards in lengths from 60cm to 1,2m that are easy to handle and to haul in just about any vehicle. You'll pay more per metre for these boards, but you'll be able to get them home.

Plywood is an even bigger problem – literally. Standard 1,2m x 2,4m sheets are heavy and just plain huge. Once again, though, you can buy plywood at

most places in smaller sizes; 600mm x 600mm, 600mm x 1,2m and 1,2 x 1,2m are common. As with shorter boards, the convenience of smaller sheets does come at a higher price.

Another great way to get shorter boards and smaller sheets is to have them cut in the store. Almost all hardware stores and the big box stores offer cutting services for boards and plywood. They may charge a small fee per cut, but it is well worth the hassle of trying to transport unwieldy large boards. You're also not restricted to getting materials cut to standard sizes; you can have them cut to any size your project requires. Just know that stores don't guarantee 100%

accuracy. If you're going to have your materials cut in the store, make sure you go in organised to get the best results. Take a copy of the materials list for your project which lists the size and quantity of every part.

As you pick out your materials, organise them before you head to the cutting area, so that you'll be able to hand them off to the person cutting. You'll have an easier time keeping track, and they'll appreciate your organisation. If your project plan came with a cutting diagram, take it along. A cutting diagram shows which parts get cut from which boards and sheets. Also take a tape measure with you so you can double-check cuts, and a pencil to mark the boards.

If you'll be hauling the materials home, bring a pair of gloves, as well as ratcheting tie-down straps to secure your

materials. If you're hauling your own materials, you'll want to know how to secure them properly. This is important to protect your materials, and it's critical for safety, to ensure that nothing works loose or falls. Another option with in-store cutting is to get pieces cut just into sizes that you can haul easily, or to have them cut oversize. That way, you can get them home, and then cut them to the exact size more carefully as you build your project.

Some suppliers may offer a delivery service which is another option if you don't have any good way to transport materials, or you'd rather get your materials full-size. To do this, you'll need to know how many of each size board and sheet you'll need – if you're not exactly sure, order a little extra. Truck delivery always has a minimum fee, so it doesn't make sense for just a couple boards, but it may when you need a

couple sheets of plywood or more. The delivery fee is often the same for a large order though, so you'll get better value when you get more material delivered. If you have a big project, delivery makes great sense, or if you have multiple upcoming projects and a place to store materials, consider having materials for all those projects delivered at the same time. One disadvantage to delivery is that you're not the one selecting your materials. You'll have to depend on the store to select straightest, flattest, cleanest boards and sheets. Today, most trucks have beds that are 1,8m long or less.

Resources

Kreg is an international brand from Vermont Sales and is available at leading outlets countrywide. For more information, call 011 314 7711 or visit www.vermontsales.co.za

Storing your wood

Now you have your wood at home, but you might not realise that incorrectly storing it can cause the boards to warp and bow. Sometimes this wood can be salvaged by squaring it off, but this takes much more time and effort. In the worst case, this wood can be misshapen beyond repair. Whenever possible, wood should be stored indoors in a cool, dry location. But if you must keep it outside, it's best to have it covered at all times.

Support boards every 400mm or so

When stacking wooden/wooden boards horizontally, make sure that the wood is supported by brackets every 400mm or so at the very least. Supporting the wood at this interval will prevent the boards from bowing.

Don't stack too much wood on one shelf

Make sure that the wood you're storing has room to breathe. Stacking too much wood on top of each other can make the wood on the bottom suffocate and become compromised. Also, the excess weight can cause the wood to bend in undesirable ways.

If storing wood vertically, make sure it's supported and elevated

Storing wood vertically is space-saving, but it's only recommended if the wood is completely dry. Otherwise, keep it horizontal until the moisture content of the wood is at its ideal percentage. For dried wood, storing vertically is recommended if you're able to support the wood at both the top and bottom to prevent bowing. Also, do your best to keep this wood off the ground to lessen the risk of water damage.



A DIY wood storage rack in the garage



Find out how a discarded door found amongst rubble, was recycled and turned into a desirable piece of art.

A.Shak has recently entered the decor and crafts market with Cameo Décor Paint. Available in a wide range of colours, the most interesting quality of Cameo Décor Paint is the fact that it does not require any preparation of the area to be painted; no primer coat, or even sanding of the surface to be painted. You can paint on smooth, glossy or rough surfaces with equal. The paint also has excellent cover characteristics and is extremely tough.

Step-by-step guide

Step 1: Depending on the finish you require, sand down the door and fill all holes or indentations to a smooth finish – use 3D paste.

Step 2: Once the holes are filled, dry and sanded down, mask out the areas not to be painted with masking tape. Remember that accuracy is important for a good end result.

Step 3: Base coat the areas that you left exposed for the eventual effect you want to achieve, namely a scuffed and worn one. The colour Unicorn was used as the base coat because we wanted it to show through the final and darker coat.

Step 4: Paint over the base coat areas with the colour you select as the top coat. This will eventually be sanded down slightly to show the base coat on the edges to look old and scuffed. We used Goblin as the final coat.

Step 5: Once the exposed area is painted you are ready for the next step on the other exposed area that will be stencilled to achieve a 3D laced effect.

UPCYCLE AN OLD DOOR

Step 6: Place the stencil carefully in position to ensure that it can be stepped-and-repeated into a continuous pattern that will cover the entire panel allocated for this effect.

Step 7: The stencil may require trimming to facilitate a continuous pattern. Position the stencil in place with masking tape and cut it carefully with scissors or sharp blade. This requires a bit of planning. The best approach is to do small areas at a time. The paste that is used to create the 3D effect requires some concentration to apply correctly.

Step 8: Apply the 3D Paste carefully with a scraper ensuring that not too much pressure is applied that may damage the stencil or force the paste underneath the stencil.

Step 9: Once the 3D Paste is slightly firm, carefully remove the stencil to show the raised effect of the 3D paste. If the paste is too dry it may prove difficult to remove the stencil. Try a small area on another surface as a trial run and test for the best time to remove the stencil.

Step 10: Once the stencil is removed from the first 3D Paste application, the stencil can be repositioned to complete the overall effect in a step-by-step sequence to cover the entire area. This takes a bit of time so be patient. The end result is worth the time and care taken.

Step 11: Once the entire area to be stencilled is done and dry, it will require some light sanding to give it a smooth finish. Either a block and sandpaper can be used, or in this case, a special sanding glove was used. Do not sand down excessively; you want the effect to be raised and have depth for a true 3D effect.

Step 12: With the stencilled areas now done, it is time to get to the previously masked off areas and to remove the masking tape. This area

will be varnished to highlight the wood grain and frame the stencilled surface.

Step 13: With the exposed wood varnished, it is time to tackle the decals that will be placed onto the other exposed panels that have been base coated previously. These decals were bought ready for application. All they require is careful trimming to ensure a good placement, before they are rubbed into place. It is a good idea to position the various decals in position prior to final rubbing down to see the overall look and feel. Once they are rubbed into their permanent position they cannot be re-used.

Step 14: It takes a bit of concentration to correctly rub the decals onto the prepared primed surface. This is mainly due to brush stroke texture that may hamper even adhesion of the decal. Just go over areas until it dislodges from the transfer sheet onto the final surface. Test it by lightly lifting the transfer sheet to see where it is sticking and where not. Take care of the recessed areas because they require a bit more effort.

Step 15: Once the transfer is done, the overall look of the project starts to emerge.

Step 16: Now is the time to decide where you want that scuffed wear-and-tear look of to be. Using fine sandpaper the edges of the door and recesses can be lightly sanded until the light base coat (Unicorn) shows through the Goblin coat.

Step 17: The end is now in sight! Use Cameo Modge Podge Acrylic Sealer to seal the decals into place and to protect them from future scuffing. It is personal preference whether you seal the 3D stencilled areas or not. You can also give the entire door a varnished finish if you want.

Resources

For more information, visit www.ashak.co.za or call 011-822-2320



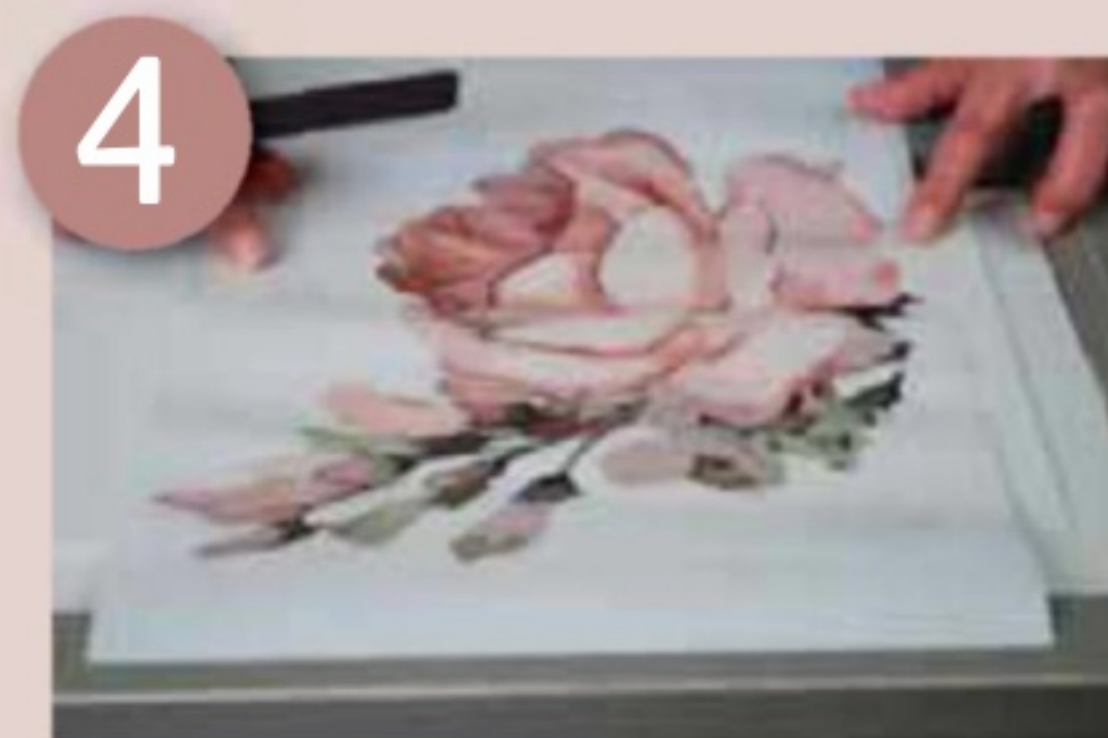
Priming around the panels



Preparing the stencil



Applying the 3D Paste



Positioning the decal images

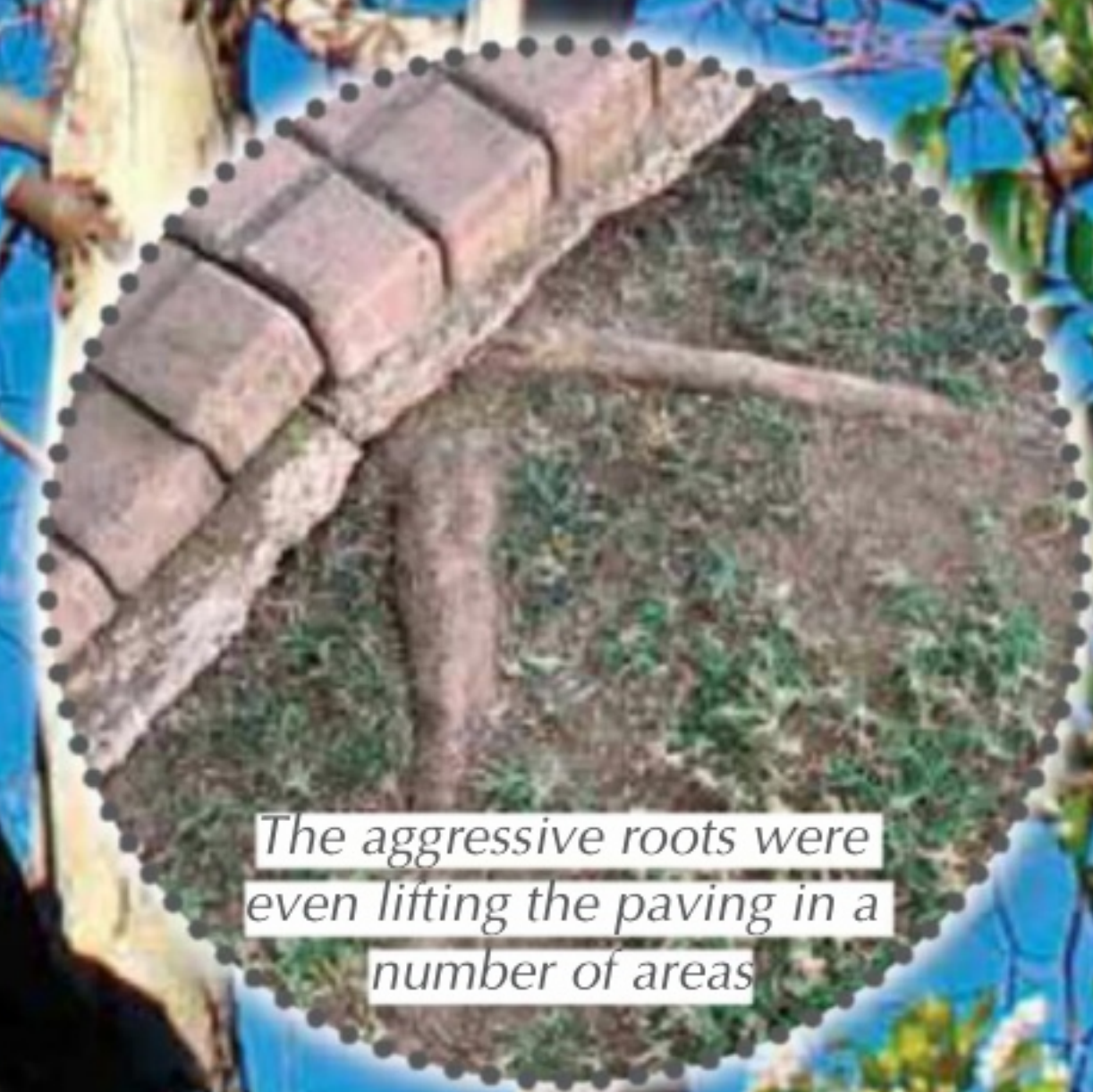


The decal done



When the roots of three trees were damaging our paving and underground pipes, they unfortunately had to be removed.

Be a good FELLER



The aggressive roots were even lifting the paving in a number of areas

When we first moved into our property, we were excited to see three semi-mature trees in the garden (two in the back and one in the front). We envisioned days spent under their shade, enjoying the outdoors with the kids and pets. What we didn't foresee, however, was the extreme damage their roots would do to our paving, walls and sewerage pipes six years later.

The culprits, we thought, were three White Karee trees – *Searsia pendulina* – yet an online search seemed to reveal that they don't possess aggressive roots. Anyway, they unfortunately had to go, and this is how we did it.

Before you start down the path of felling a tree, you need to have the right equipment for the job. If you plan the felling and which equipment to use,

not only are you in for a safer working session, but your post-felling work can also be a lot easier. First of all, ask yourself if there are any major obstacles – such as overhead lines, walls or buildings – in the area. Your equipment should all be in good condition and you should test it before using it on a tree.

Never work alone; if possible, you should have some friends come over

to help you. Not only will they be able to help direct the fall of the branches, but they will also be around in case something goes wrong. The following list covers the main pieces of equipment that would be needed to cut down a mature tree on your property:

- **Chainsaw:** This is perhaps the most important piece of equipment you'll need. The chainsaw should have about 3.5 horsepower and it should have a 50cm bar. The bar length indicates the depth that the blade can penetrate, so 50cm should be enough to cut down most trees.
- **Safety glasses:** Many people overlook the importance of using safety glasses when doing work like this. However, the truth is that flying debris can seriously harm your eyes when cutting with a chainsaw.
- **Ear protection:** Chainsaws are loud, so earmuffs, especially if you will be sawing for an extended period of time, are highly recommended.
- **Leg protection:** If you hit a knot in the tree, then the saw can kick out of the tree and hit you in the leg. It is recommended that you use either knee-high safety boots or wear heavy leg protectors.



The roots – as well as the shade from the thick foliage – hampered lawn growth in the garden

- **Rope/harness:** The rope should be roughly three times longer than your tree is high. It will be used as a safety backup in case there is an issue.

When you start, ensure that you are safely harnessed to the tree or ladder and use the chainsaw to cut through smaller branches, followed by slightly larger branches. Drag the cut limbs out of the way. Make an offset cut to sever very large limbs by first cutting straight down about two-thirds of the way into the limb. Then cut up from the beneath the limb until the severed limb falls away. Trim off all the limbs first, before sawing the trunk and larger branches into more manageable pieces for firewood or to take to the dump.

Once the trunk has been cut to roughly shoulder height, use an axe to methodically work through the roots of the tree until the trunk can be easily pushed over. Saw the remaining part of the trunk and the roots into smaller

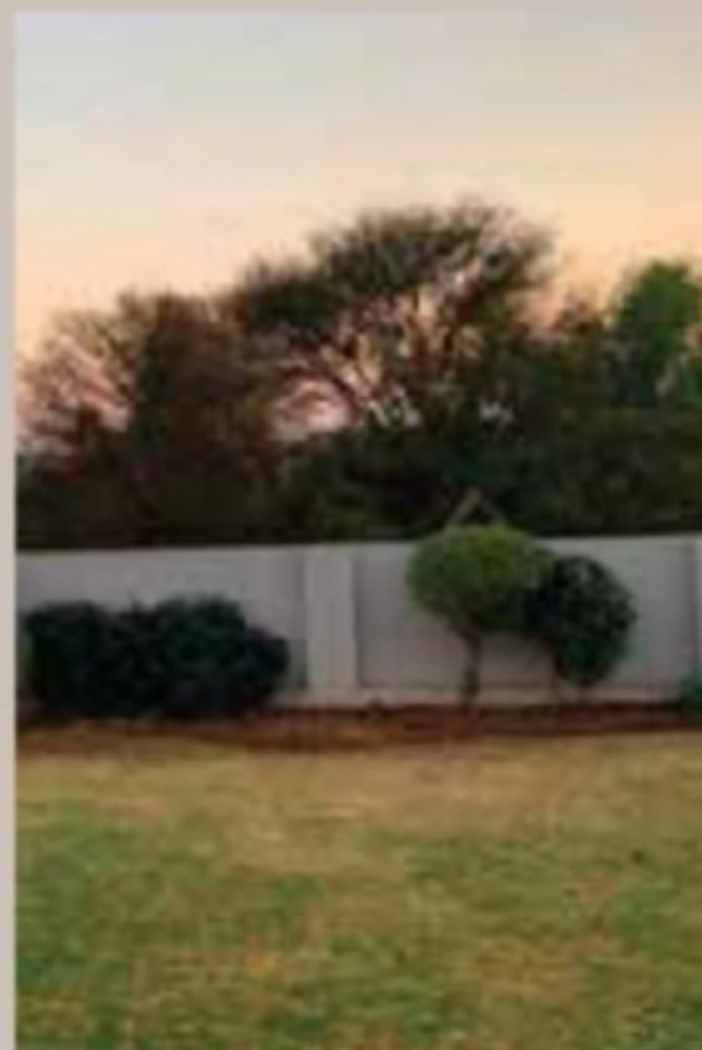
sizes. If you own a bakkie or a trailer you should be able to do most of the clean-up yourself, otherwise it may be worthwhile contacting a rubble removal company.

Once the branches and trunk are gone, you will notice that your garden is covered in 'sawdust' remnants from the sawing. This will act as a great mulch for the garden so simply sweep and mix it into your flower beds. Our plan is to get replacement trees which are smaller and without such damaging roots, yet in the meantime we have planted grass seeds in the areas the trees were to revitalise the lawn.

Cutting down a mature tree can be a dangerous thing to do, so it should be handled by properly trained and equipped professionals whenever possible. If you are unable to hire a professional and need to fell the tree yourself, then the above tree cutting tips may help everything go smoothly.



The three trees which were causing damage at our home



After: The trees removed and the garden transformed

A rooftop photovoltaic (PV) system has its electricity-generating solar panels mounted on the rooftop of a building or structure

THE INS AND OUTS OF PHOTOVOLTAIC (PV) POWER GENERATION

In just over two years the cost of electricity will breach R3/kWh! What will that mean for your home or business?

>> Teresa Kok

The time to take back control of your power costs and security of electricity supply for your home and business has never been more crucial. South Africa is on the precipice of a radically different energy future. With load-shedding in full swing and spiralling electricity costs, no doubt you are looking at energy alternatives, and one of the very best solutions is solar photovoltaic (PV) electricity generation. Right now, solar PV delivers at least a 15% return on investment each year based on electricity savings, far outstripping any other investment vehicle where you could place your money. Investing in solar to save on your electricity costs is a no-brainer, and the very best investment you can make right now for your business or home over the next 20-25 years.

Before you make any big decisions, here is some very important information that you need to know about solar PV to ensure you get the maximum benefit and return from your solar investment.

What is rooftop PV?

A rooftop photovoltaic (PV) system has its electricity-generating solar panels mounted on the rooftop of a building or structure. Solar panels are exposed to

sunlight or solar radiation and generate electricity which is called a photovoltaic effect. This solar power flows via cable to a device called an inverter which converts the direct current (produced from the panels) to alternating current. With the inverters synchronising the solar power and the Eskom grid, that power can be fed directly into your internal electrical network and save electricity. So every kWh generated by the solar system is a kWh less required from Eskom or local municipality.

Planning for PV

Planning for a PV system will require you to analyse your electricity use, implement energy efficiency measures, decide if you want to operate your system entirely off grid or use a hybrid or grid-connected solution, and then finally select, the technologies to help you meet your objectives. And because your system is going to be working for the next 25 years, you need to be sure about working with a supplier that has the network, financial stability, product quality and warranties in place to maximise your investment. Reputation, credibility and the expertise of your renewable energy partner are fundamental to you realising

the maximum benefit from your PV investment.

Types of PV Connections

A solar PV system typically comes in three configurations:

System 1 Grid Tie – No batteries, grid-connected system. This system supplements your grid energy usage but does not provide battery back-up. In the event of a blackout or power outage, your solar system is forced to shut down. Where Eskom outages are not the issue, but cost savings are, this is a highly practical solution to dramatically reduce your electricity bill by producing as much of your daytime energy requirements as possible while the sun shines. If we take the average sun-producing time in summer between 7am and 5pm, your system will produce five times the capacity of your solar panels, free from the sun each day.

System 2 Hybrid – Batteries and a grid connection, commonly referred to as a hybrid system and with the correct installation will act as a UPS (uninterrupted power supply) in the event of a power outage. The PV system will charge up the batteries first and then

the excess production will supplement your household/ business energy needs. Many of our clients start with system 1 with a plan to build up to a system 2 and then add battery back-up at a later stage as their budget allows to build up to a system 2 configuration. The great benefit of solar PV is that it's entirely scalable and you can add to it as your needs grow. This is the preferred option when power outages are an ongoing issue.

System 3 Island – Only batteries, no grid connection, useful for areas where no grid exists, such as farms or remote areas. The energy produced will charge up the batteries which should allow for three days' worth of energy needs and these batteries will feed the power requirements of the property.

What is the cost to install PV?

As the price of electricity rockets, so does the number of people who leave the grid, as ever-cheaper photovoltaic (PV) panels and small electricity storage solutions become more and more attractive when compared with the municipal account. In fact, solar energy is now sitting at around R0.90/kWh, while Eskom's average is currently at

R2.00/kWh and racing towards R3.00/kWh by 2021.

If we look at a typical PV system, your initial capital layout would be in the beginning when you purchase the equipment and on average takes between 5-7 years to offset the costs, but then for the expected 25 years of the lifespan of your panels, you will get free electricity. In reality, even at the end of 25 years your panels will still be 80% efficient. Another advantage of PV is that it is entirely scalable and can be ramped up as your requirements demand and, more importantly, your budget allows – the proviso of course is that you invest in the correct inverter and equipment from the outset with a solar PV professional who understands your long-term objectives, and factors this into your planning.

Solar is a major purchase and probably one of the most important investments you will make towards securing your self-sufficiency and saving a huge amount of money on electricity bills. It's also going to be attached to your single most valuable asset – your home or business – and considering you're essentially setting up your own mini-powerplant, you don't want to get it wrong.

A quick look at Hello Peter and the proliferation of 'mom-and-pop' contractors that have suddenly sprung up trying to cash in on the renewables boom are evidence that there are plenty of very bad deals out there, and even more questionable installation and safety standards. A cheap PV deal is likely to be a very expensive lesson.

Before you rush into making a deal with a provider, make sure you are dealing with qualified professionals who comply with the highest industry standards in terms of safety and system quality, technical and safety training with a good service ethic that you know is going to be around for years to come and honour warranties.

Why do I need to implement energy efficiency measures beforehand?

Implementing energy efficiency measures before you buy your PV system will reduce your electricity use and allow you to buy a smaller and less expensive system. For example, converting geysers which are usually your biggest electricity users to solar or heat pumps.

Analysing your electricity needs

Calculating your electricity needs is the first step towards getting PV ready. A thorough examination of your electricity needs helps you determine the following:

- The size and cost of the system you will need.
- Fluctuations in your energy usage during the day and night and over the months to manage peak demands.
- Energy saving measures you can implement to reduce your electricity use before installing PV so that you save on the costs of a bigger system simply by being more efficient.

By conducting a load analysis, your wattage and average daily use of all of the electrical devices that are plugged into your central power source will be calculated. Some loads, like your refrigerator or electric fencing, use electricity all the time, while others, like power tools or large format printers, use electricity intermittently, known as selectable loads.

Some providers will ask you only for an electricity bill and attempt to provide a PV solution based on this, but the approach is fundamentally flawed and inaccurate since your bill cannot reveal day and night usage, selective loads or peak demands which need to be factored into your PV solution. A thorough load analysis is a must.



Businesses can use solar power to offset electricity costs

Resource

www.oneenergy.co.za

Updating your home with new downlights comes with its own set of challenges, especially if you don't have existing fixtures in place

7 TIPS TO CONSIDER WHEN INSTALLING DOWNLIGHTS

You can transform your interior with changes like a fresh coat of paint, new floor tiles, and modern appliances. But if your lighting is old your home still won't have an updated look about it.

Downlights immediately give a space a modern feel and should be one of your first considerations if you're remodelling your home. If you're making the upgrade, keep these seven tips in mind.

1. Hire an electrician

You may consider yourself quite the handyman/woman around the house but installing downlights is often best left to a professional. Updating your home with new downlights comes with its own set of challenges, especially if you don't have existing fixtures in place. Multiple holes need to be made and rewiring may be required. A qualified electrician will know the best course of action.

2. Consider using integrated LED downlights

Integrated LED downlights have a better thermal management system than retrofitted GU10 LED bulbs. They run at a cooler temperature and are therefore less likely to overheat. This extends the lifespan of the integrated LED downlights

to about 50 000 hours so you can rely on its illumination for an impressive 17 years. In addition, integrated LED downlights offer a wider spread of light which means you'll need fewer fixtures to illuminate your space. You're also guaranteed optimum light placement thanks to their tilt capabilities.

3. Go anti-glare

Anti-glare LED downlights use a special lens to distribute light evenly and eliminate the LED glare. If you're illuminating a workspace, this type of downlight is highly recommended.

4. Space your downlights evenly

There should be at least a 1m space between your wall and fixture. Each downlight should be spaced 1-1,5m apart.

5. Dim your downlights by zone

Installing a dimmer switch allows you to control the amount of light emitted from your downlights. Downlights turned down low create a cosy atmosphere,

save on energy, and increase the lifespan of the bulb. Instead of installing all your downlights on one dimmer, consider dimming them by zones. This is especially useful for open plan living spaces where perhaps you want a more intimate atmosphere around the dinner table and brighter lights in the kitchen.

6. Create a focal point

Use your downlights to showcase a favourite painting or interesting architectural feature in your home. Downlights that tilt or rotate allow you to direct light in a specific direction and create a focal point.

7. Complement your downlights with other fixtures

And lastly, always remember that the lighting in your home should be layered so that your space does not look flat and lifeless. Use multiple light sources at different levels to complement your downlights. Wall sconces, table lamps and floor lamps all work well to create a welcoming atmosphere.

Resource: www.eurolux.co.za

BRIGHT IDEAS

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

A handy solution

Just recently I was wracking my brain for some ideas for a birthday gift for my son who turned 45. In desperation I turned to DIY. I found out he purchased four mini cooking pots (cast iron pots). The first time he tried to use them was a failure due to the fact he did not have the right stands or flame holders. So based on this I decided to make up four metal stands and four wooden holders holding four stainless steel 'shot' glasses. The rest of the material came from scrap bits around the workshop.

When I had made the wooden holders the holes were rough from the hole cutter and sanding was going to be tedious. I then took the four 'wheels' (cut outs) and glued 120 grit water paper to them then inserted some set screws with nuts and washers. As you can see from the photos, when

held in the chuck of the drill, they fit perfectly into the bit to be sanded. Job done except numbering each holder and sealing them to prevent any grease settling into them. I think the pictures are self explanatory and the finished articles were very acceptable and practical. Present problem solved.

John Watt, Alberton



Magnetic tool holder

Mount a large magnet to your wall or pinboard in your workshop for quick-change bit storage or to keep all your metal tools in one place. It's a great, handy, simple tip to ensure you have everything you need close by in one place.

Derick Cabrera, by email



WINNER

WIN!

A Tork Craft 6 level storage rack

Strong, neat storage racks are something every workshop, storeroom and homeowner need, as they will give you more space. The new Tork Craft storage racks are simple to install and will go on any wall; they can store many items of varying lengths or widths. They are pre-set at 160mm heights and 310mm shelf depth for extra wide material. The load capacity is 22.5kg per horizontal bar. For more information contact, Vermont Sales on 011-314-7711 or visit www.torkcraft.com.

Send your bright ideas to:

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

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

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

TorkCraft
Tools for every job



valued at R804

Congratulations to Derick Cabrera who wins a Tork Craft Aluminium case set to store fragile valuables.



This issue, learn how to make
your own vibrant candle
holders for the home.

Light up the night

Most homes tend to have a selection of tea candles (sometimes called votive candles) in the drawers, especially during times of load shedding! While it is easy enough to sit the candles on a saucer, this is a fancier display solution for them. We came across this idea on the MakeZine website and decided to make our own. The project is inexpensive, and the materials used are generally things which you will have on-hand at home. It is a project which is quick and easy, and a great way to whip up custom party décor on the cheap. The original idea was inspired by memories of making faux-stained glass in primary school and with that in mind they came up with these fun little glass votive holders.

What you will need

- Tissue paper in your desired colours and patterns
- A glue which dries clear, i.e. Cold wood glue, Mod Podge or Crafters glue
- Paintbrush
- Scissors
- Glass holders which will fit the tea candles
- Paper punches (optional)
- Ear buds (if needed)

Step-by-step guide

Step 1: Decide what colours of tissue paper you'd like to use and what paper punch shapes you want to try out – alternatively, simply cut out shapes with a pair of scissors. For the design, you can go monochromatic, or choose a wide variety of colours for a playful confetti-style look. Punch or cut out a nice little pile of paper shapes (you can always cut more if needed) and set them aside.

Step 2: Scoop out a bit of glue with your paintbrush and water it down a bit

so the texture is thinner. You don't want it to be very drippy, just a bit thinned-out. We mixed it up in the lid of one of the glass containers which we used.

Step 3: Start fixing the paper to the glass using your paintbrush. Tissue paper is very thin that you can actually pick up the pieces using the wet paintbrush if you like. You can brush the glue mixture onto the glass first, and then stick on the paper shapes. Either way, brush over the shapes afterward to fully saturate them with glue. Wet tissue paper can rip easily, so try not to get too rough with it. Take your time and brush gently, attaching more and more shapes, overlapping them however you prefer. Once your glass is fully covered, set it aside to dry.

Step 4: Once it is dry, you might notice that any areas you have brushed with glue that aren't covered in tissue paper will have a frosted look. This has a nice effect, but if you would prefer these areas to be clear, simply dip an ear bud in hot water and carefully scrub off the glue.

Step 5: Once everything is dry, plunk in a candle, light the wick and enjoy! If you start building a stash of tissue paper – which is easy enough to do since scraps of it seem to show up around nearly every holiday or after every school project – you will have a variety of colours on hand, making it easy enough to match your candles to any theme you can dream up.



All the materials you will need



Apply the glue to the glass



Fix the first piece of tissue paper and cover with glue



Overlap the pieces of paper and glue



If you have enough containers, make a few different designs



Candles in and ready to go!

ASK OUR EXPERTS

Our panel of experts answer your questions on DIY problems



Plumbing queries

I have a two questions regarding plumbing. Firstly, I stay in a house (built before 1958) where the entire plumbing for cold and hot water is done with the half inch and three-quarter inch steel pipes.

I recently had a problem with the pressure valve for the geyser and the plumber who was sent by the insurance company replaced it using copper piping to mount it where the faulty valve was. (It looks like there are special conversion fittings available to convert from steel to copper pipes).

My question is, is it safe to use copper with the steel pipes or is there a danger of a chemical reaction between them? The second question is, is there any advantage/disadvantage to use either copper or steel piping for the plumbing in a home?

Thank you for a very informative and practical magazine – it has answered and helped in many areas over the years.

Wolfgang Ries, Johannesburg

Ed replies: According to www.inman.com, if you make a direct connection, these two materials will interact in a chemical reaction that will corrode the joint and eventually cause it to start leaking.

To safely connect copper and galvanized steel, you have two options. Since brass doesn't react with either the copper or the zinc, one method is to make sure you have a threaded female end on both the copper and the steel pipes, and then connect the two by simply inserting a short threaded brass nipple between them. The second method is to use a special transition fitting called a dielectric union. The dielectric union has a threaded steel female fitting on one end, which is threaded onto the steel pipe. The other end has a female copper slip (non-threaded) fitting, which is soldered onto the copper pipe. The two halves of the joint are then connected using a lock nut and two insulating washers that prevent the copper half from contacting the steel half.

To answer your second question, steel is one of the strongest and most durable metals available for plumbing. Steel can withstand rust and corrosion exceptionally well, and remain largely unaffected by temperature variances. In areas of extreme cold where

water is likely to freeze in the pipes, the steel is most often able to withstand the internal pressure without splitting or cracking.

With steel being as tough as it is, it does make it more difficult to work with for plumbing purposes. This makes installation a longer and costlier process. If steel is going to be used in plumbing, then it will need to be galvanised. However, if your water supply is treated with chlorine, this may leach traces of lead into the water supply over time. Certain grades of steel are more resistant to chloride corrosion, such as 316/316L, so the type of steel that you are using in these areas will matter.

Copper piping, by contrast, is a softer, more malleable metal. It can be bent to shape which negates the need for additional fixtures and fasteners. However, copper plumbing fittings can be more costly than steel fittings. Copper offers excellent resistance to bacteria and rot which assures a safe and clean water supply. Copper, however, doesn't hold up as well in extreme cold. If water freezes in copper pipes it can cause leaking and splitting. A point to note is that if you live in an area with high water acidity then you will find that the copper piping will corrode.



A hamper from Den Braven

Includes PU Foam, Silicone 1001 Universal, Acryl-W, Woodflex, High Tack, Silicone Spray, All Round Sealant, a Professional applicator gun, a Den Braven branded t-shirt and cap, a Travel mug, a Pocket tool kit, a Pocket spirit level with tape measure and note book with pencil, a Key ring with bottle a opener, 2 pens and 1 ruler and a Piggy bank to put all your savings in for the time and money you save by using Den Braven Sealants and adhesives and doing it right the first time!

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

Send your queries to:

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

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

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



Our winning query comes from Wolfgang Ries who wins a hamper from Den Braven.

Tired of hopping around

My question is that I have a lot of hollow sounding tiles. I've marked them with nail polish and try to play hopscotch so they don't crack.

I don't have the budget to retile the whole lounge and kitchen, and even if I only lifted the loose ones out, I don't think it would be possible to find a match after having them for over 12 years.

Is there any solution to this?

Brenda Fernandes, by email

Ed replies: According to industry standards, having a hollow sounding tile is not a defect in itself. Although a hollow sounding tile can be a symptom of a defect.

A tile having a hollow sound could be an indication that there is a void under those hollow sounding spots and/or the tile isn't bonded at those hollow sounding spots. A hollow sound can be caused by the configuration of the tile assembly or it could be the result of having some sort of membrane under the tile. It could be an indication that the underlying substrate

has a condition that is causing the hollow sound. The only way to determine what is causing the hollow sound is to carefully remove the tile and evaluate the underlying conditions.

If the hollow sound is the result of having a void under the tile that is larger than the size of a golf ball, then the tile could be susceptible to being damaged if a hard, sharp object fell on that spot. Residential floor tiles can have up to 20% voids as long as the voids are dispersed and not

larger than the aforementioned size, and that the corners and edges of the tile are adequately supported.

If only a few tiles out of many sound hollow, then I would not expect that all tiles were installed in a spot bonded method. If the grout joints are not cracked around the tile, then the tile is not likely loose. It is not that difficult for a professional tile installer to replace a few tiles, but as you mentioned, finding a suitable match could be a challenge.



Too cold/too hot

I hope you can help – our home is really hot in summer and really cold in winter, especially our bedrooms where hot and cold air comes in unimpeded through the doors and windows, even when closed. How can this be fixed in a way that won't cost an arm and a leg?

Barbara Grant, Krugersdorp

Michael Berg from Den Braven replies:

In general for cooling or heating spaces, the areas around windows, doors, cornices and floors have to be insulated, i.e., sealed. Perimeter sealing both internally and externally is the sensible way to do it.

One would use a combination of products i.e. Den Braven PUR Foam (that has a dense

cellular structure) as gap filler and insulator; Den Braven Hybriflex 540 for larger joints requiring more movement around dissimilar substrates (around aircons, floors); Den Braven Acryl-W around cornices as this acrylic has good adhesion, movement and filling performance (also paintable and fast drying); and Den Braven NO silicone for exterior use where UV might be a concern. Den Braven Hybriflex 540 can also be used externally should there be a need to overpaint the area.

The products are all low in VOC, contributing to responsible sustainability. For more information, call 011-792-3830 or visit www.denbraven.co.za



My late father used to say: "There is no such thing as hardwood offcuts. There are only small pieces of hardwood waiting to be used."

WOODEN SPATULAS

I had some small pieces of white oak that had been recovered from the staves of a barrel-shaped plant holder. As Christmas is just around the corner I needed to make some simple items suitable for sale as presents. I decided to use the staves to make wooden spatulas – see the title picture. I had made these in previous years and they had been popular. My marketing slogan was: "Prevent scratches on your expensive coated utensils."

My spatulas require a 250mm x 80mm x 7mm blank. The staves had been steam bent and I cross-cut them into 250mm lengths to minimise the curvature. This left me with a new problem. A safety rule in my workshop is: do not attempt to thickness anything shorter than 300mm. Were the offcuts going to end up in the firewood bin after all? No, they were not! I had solved the problem of thicknessing

short pieces years ago. In fact, I wrote an article for the March 2009 issue of *The Home Handyman* magazine on this topic.

The blanks were all ripped to the same width of 80mm. The slope of the grain of each blank was examined and the 'leading edge' was marked on each piece. Three pieces were laid end-to-end (with the grain running the same way) on a flat surface and sandwiched between two 1000mm lengths of 15mm x 15mm offcuts. Photo 1 shows the result after the glue had dried, the clamps removed and a first pass through my thicknesser. The extra length of the 1000mm piece precludes sniping on the first and last piece. A few more passes through the thicknesser resulted in the 'board' shown in photo 2. Compare this result with the starting point in photo 1. I still get a kick out of cleaning up an aged piece of

wood and exposing the colour and grain pattern. The next step was to set the fence on my table saw at 10mm from the blade. One cut along each side released three clean pieces of wood ready to be turned into spatulas.

Initially the spatula is symmetrical. The shape could be cut with a hand fretsaw, a jigsaw, a scroll saw or a bandsaw. Cutting the shape is not the problem. The problem is smoothing the sawn edge. A bastard-cut file followed by hand-sanding would do the trick. A dedicated bobbin sander or a bobbin chucked in a drill press could also be used. I don't like bobbin sanders: it is difficult to get a smooth curve. Bumps and dips are inevitable. Without doubt pattern routing is the answer. Photo 3 shows the combined jig/pattern that I used. The base, made from 6mm MDF, is the pattern. As can be seen it is the

shape of half a handle. I make most of my patterns from 6mm MDF. It is relatively cheap, flat and stable, and most important of a homogeneous composition. It is easy to fine tune the pattern by draw-filing with a bastard-cut file followed by hand-sanding. The three pieces of 50mm x 16mm kiat (marked 'Jig') that are attached to the pattern form a cradle to hold a spatula blank. A toggle clamp facilitates quick clamping / releasing of the blank.

A blank is clamped into the jig and has the one side of the spatula shape marked using the pattern as a template. This shape is rough cut (0,5mm to 1mm proud of the pencil line) on a bandsaw. The blank is clamped in the jig and pattern routed on the router table using a top-bearing pattern bit. The two end pieces of the jig have been cut and sanded to match the extensions to the pattern. These are marked "Lead-in" and "Lead-out". They give a very safe start (lead-in) and end (lead-out) to the pattern-routing cut on the router table. A 3mm MDF spacer (photo 4) is placed in the jig. The full shape of the spatula is now obvious. After marking and band sawing the half-completed blank is clamped in the jig (photo 5). The result of a quick pattern-routing pass on the router table is shown in photo 6. The spatula is perfectly symmetrical, the curves are fair (very smooth) and as a sharp router bit was used no sanding was required.

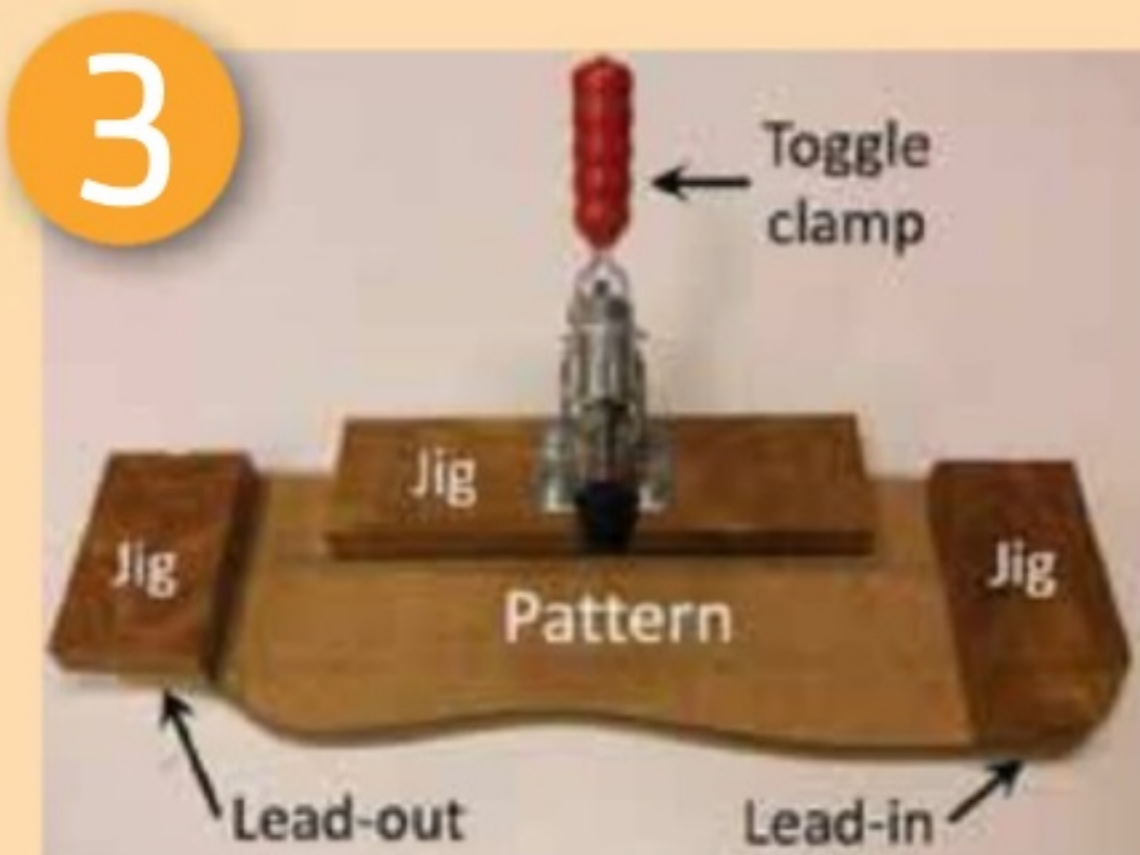
The next job was to sand the faces of the spatula. A drum sander would be the ideal answer, but I don't have one. Photo 7 shows the jig I made from scraps of 3mm MDF and 16mm chipboard to hold four spatulas while they were being sanded. My random orbital sander worked well as a result of the secure positioning and the increased sanding area – photo 8. The design of the jig/pattern (photo 3) resulted in a small nib at the handle end of the spatula (photo 7). A bandsaw and belt sander were used to remove the nib. White oak tends to splinter when cut across the grain.



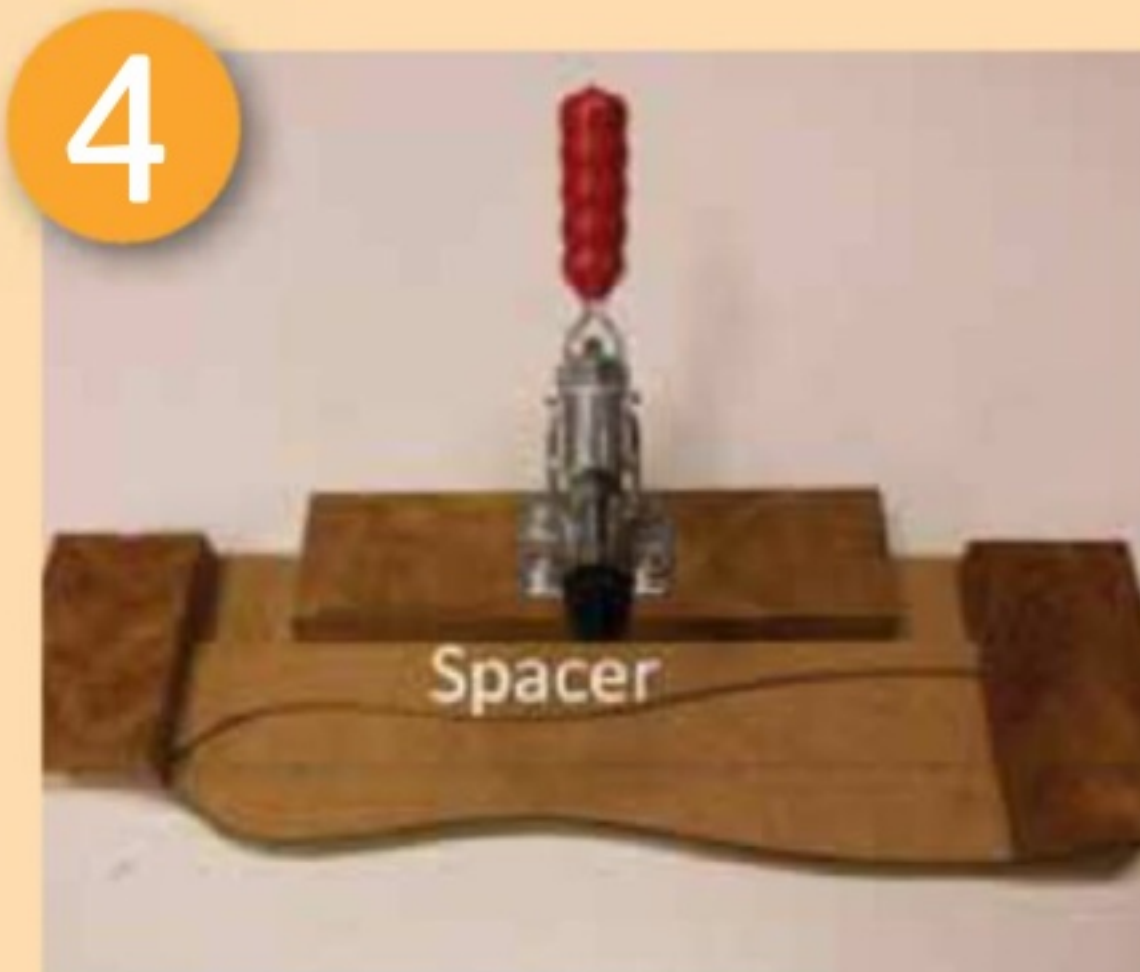
1 First pass through thicknesser



2 Looking much better



3 Pattern/jig



4 Spacer for second edge



5 Ready to rout second edge



6 The result



7 Sanding jig



8 Sanding faces of spatulas



9 Well-worn insert plat



10 Alternative to zero-clearance insert

11



Cutting tip off at an angle

13



Sharpening jig in use

12



Sharpening jig

14



Sharpened tip

has been lowered so that is just above the work. I see too many YouTube and other videos where there is a large gap between the bandsaw blade guard and the work. They never post the follow-up video showing the missing fingers.

The shaped edges of the spatula were eased with a 1/8" round-over router bit. This can be seen in photo 11. Photo 11 also shows the jig used to cut the tip of the spatula off at 15 degrees. I am using a radial arm saw. The same approach would work on a sliding mitre saw. One step left: sharpen the tip of the spatula. A belt sander is the machine for this job. The final jig is shown in photo 12. As the tip of spatula is at an angle the jig is double sided: one side points the spatula down (shown) and the other side points the spatula up. The use of the jig is shown in photo 13 and the sharpened tip in photo 14. I use liquid paraffin to oil all the wooden kitchen items I make. The reason is explained in the care note given below. A copy of this note is included with every spatula.

Caring for your wooden spatula

Do's

1. Clean your spatula after use with warm water and a mild detergent.
2. Dry it completely before storage
3. Treat your spatula regularly (you will see when it is looking dry) with liquid paraffin (from your local chemist). It is food safe, odourless, tasteless and will not turn rancid. Let the oil soak completely into the surface and wipe away any excess.

Don'ts

1. Place your spatula in the dishwasher.
2. Leave it to soak in the sink.
3. Treat it with food oils such as olive oil. These can become rancid over time.
4. Leave it in direct sunlight or close to a heat source.

The table insert plate on my bandsaw (photo 9) has seen better days and would increase the splintering problem. Photo 10 shows how I achieved a splinter-free cut with a piece of Masonite that replaced a zero-clearance insert. I must take this opportunity to point out that the bandsaw blade guide (photo 10)

There is still time for you to make some spatulas for Christmas presents. If you only are going to make one or two you don't need all the jigs I used. I make spatulas twenty at a time: the jigs help me work safely, accurately and efficiently. If you would like a full-size pattern send me an email.



ABOUT DENIS:

Denis Lock runs a woodworking school and shop in Midrand, Gauteng. He can be contacted at denis.lock@worldonline.co.za or 082-267-5948. Visit his website at www.routingwithdenis.co.za. Copyright © 2019 – DN Lock



<< Scan for more info

FUSION DIGITAL

LOOKING FOR COST-EFFECTIVE PRINT SOLUTIONS?

Whether you require a simple vinyl decal, wallpaper, flags, a vehicle wrap, pop-up banner, billboard, gazebo or a selection of menu displays, **Fusion Digital** can bring your images to life!

OUR PRINT SOLUTIONS INCLUDE:



PVC

PVC is an economical, practical, durable and weather-resistant printing substrate.



BANNERS

Banners provide great exposure at events and for other on-location promotions.



SELF ADHESIVE VINYL

Vinyl is a step up from conventional print advertising and offers an effective way to make your business seen.



OTHER

We have additional printing solutions from fabric to wallpaper and backlit film. We also offer finishing services.

FOR MORE INFORMATION:

Tel: 011 614 7947/8

Address: 28 Wright Street, Industria West, Johannesburg

WOODWORKER'S CORNER

Sharing techniques, ideas and a love of wood

Woodworking associations

The Woodcrafters Association of Durban promotes woodturning and general woodcrafting. Founded in 1991, the membership is 75 and they encourage members of all ages and both sexes to join. Meetings take place at 5.30pm for 6pm on the second and third Mondays of each month (the second Monday

focuses on woodcrafting while the third is for woodturning). Meetings are held at the Reformed Church at 1 Voortrekker Street, Pinetown. *For more information, contact the chairman, Neville Hogan on 083-498-9252 or hogans@iafrica.com, or alternatively, the secretary, Jeff Moys on 072-719-9086 or jeffanne@afrihost.co.za*



Spotlight on African rosewood (*Guibourtia coleosperma*)



African rosewood is produced by a large evergreen tree, *Guibourtia coleosperma*, that belongs to the legume family and occurs naturally in Zimbabwe, Botswana, Namibia, Angola, Zambia and southern Democratic Republic of Congo. The name 'rosewood' refers to the pink to reddish colour of the heartwood, but it is not a true rosewood, which is produced by *Dalbergia* species. Apart from the valuable wood, the seeds of this species are roasted and pounded into meal for consumption and many parts of the tree have medicinal application.

The genus *Guibourtia* consists of 16 species – 13 of these are native to tropical Africa and three are found in South America. Trade in a few of the African *Guibourtia* species (*G. arnoldiana*, *G. demeusei*, *G. pellegriniana* and *G. tessmannii*), commonly called Bubinga, has been banned since 2017 by the CITES convention. However, this does not include African rosewood.

Sources:

Dyer, S, James, B and James, D. 2016. Guide to the properties and uses of Southern African wood. Briza Publications, Pretoria

Prospect Database. 1997-2004. Oxford Forestry Institute, Department of Plant Sciences, University of Oxford

African rosewood is suitable for various applications, ranging from small, decorative pieces to large architectural woodwork. Uses include flooring, panelling, joinery, mining timber, sleepers, furniture, cabinetry, interior trimming, decorative veneer and turnery. The wood is imported into South Africa and is available from a number of merchants.

The attractive heartwood produced by this species has a pinkish to reddish-brown colour with dark, purplish striping. The outer sapwood is pale cream to straw-coloured. The wood is lustrous, has a fine to moderately coarse texture and a straight to interlocked grain. The properties of the wood are similar to Kiaat (*Pterocarpus angolensis*), but it is heavier. The mean density of air-dried African rosewood is 810kg/m³ with a range of 772 to 900kg/m³. The wood is very stable in use and gets a medium rating for most of its strength properties, but it has low elasticity. It is

>> Stephanie Dyer

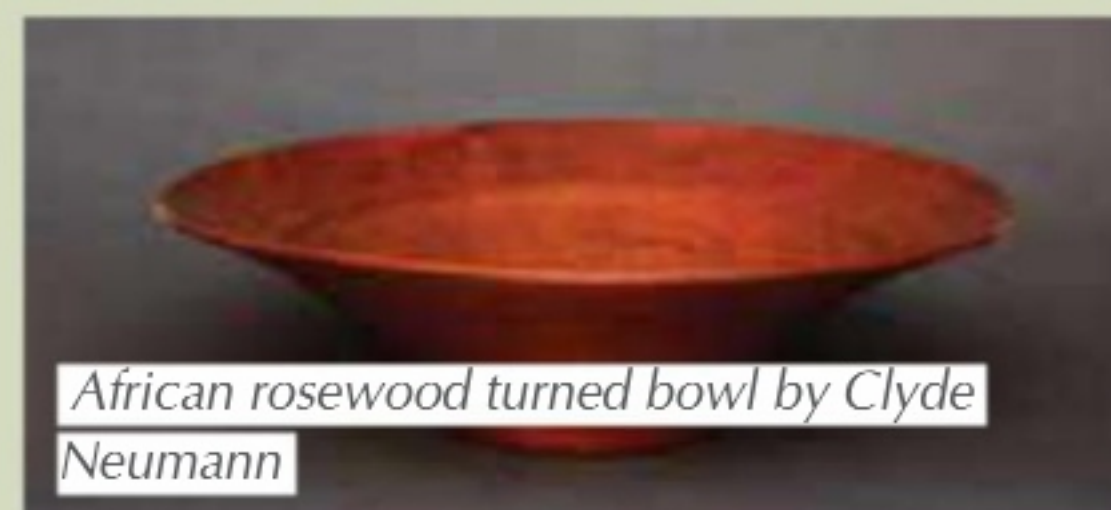
durable and moderately resistant to fungi and borer and it is extremely resistant to preservative treatment.

Despite its hardness, the wood saws easily and cleanly. Tungsten-tipped saw teeth are recommended when processing the wood. It works easily by hand or machine and can be planed to a smooth finish. Pre-boring is recommended to prevent splitting during nailing. The wood has good glueing properties and polishes and varnishes satisfactorily. It carves and turns well.

This lovely wood comes highly recommended by woodworkers.



African rosewood



African rosewood turned bowl by Clyde Neumann

Photo's by Peter Upfold

Diarise the Hardware Centre woodworkers expo's

The famous Hardware Centre Woodworkers Expo's have become renowned as a get-together for all woodworkers and likeminded people. If you have an interest in tools, and woodwork, this is the place to be. The company has over 15 different brands represented at the shows, with each one having their own area to display and demonstrate their products. It is without a doubt the biggest Woodworking Expo in South Africa! And best of all – the entrance is free!

The Cape Town Expo will be held on 22-23 November at M5 Business Park, Block B, Unit 3, Eastman Road, Maitland, Cape Town and the Johannesburg Expo at the Randburg branch (Corner Malibongwe and Rocky Roads, Randburg) on 29-30 November.

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



Undeniable woodworking truths

Perfect practice makes perfect

When we decide to start a new project, we can't wait to get to work. However, woodworking is a collection of skills that are refined by practice. Didn't your parents and teachers tell you, practice makes perfect. The truth is that 'Perfect practice makes perfect.' You should not learn new skills on the job. The quality of your project suffers. Try new skills first on some scrap.

Dry-fit prior to glue-up

This step is skipped when we rush. Overconfidence breeds this result, as well. Sometimes we simply forget. No matter what the excuse, dry fitting saves a lot of heartache. Tight joints lock up when we apply glue and freeze before coming together completely. You do not want to race against the glues set time, trying to hammer apart a piece. A dry-fit helps you figure out which components to put together first, which clamps to use, and where to put them. You do not want to scramble around or discover any unpleasant surprises after you spread the glue, and the clock is ticking.

No one tool will do everything

It is an inescapable truth that our craft requires a wide range of skills, techniques and tools. We may wish it was different, but there is no universal wonder tool that does everything perfectly and effortlessly. In an attempt to use one machine, woodworkers wind up working in awkward and slow ways. Some woodworkers spend hours making tenons

on a table saw. They may spend hours on a router jig to cut curved, tapered table legs, when a bandsaw and a well-tuned spokeshave do the job in less time.

Use both hand tools and power tools

Woodworkers tend to come in two extremes. The first are those who only use machines. Others do everything by hand. You cannot do it all by machine, but working only by hand wastes time. If you perform an operation only once or twice, it might be faster and easier by hand. The same applies to work like fitting joints.

Who wants to spend an afternoon thicknessing planks with a jack plane just because they did it that way in the old days? It is better to spend 20 minutes at the thickness planner and save your valuable workshop time for the essential parts. The real truth is that an efficient, effective woodworker knows how to use both machines and hand tools.

Keep your workshop clean

Think of your workshop as a tool. Keep it well maintained. We all get so involved in our work that our bench top and every other flat surface quickly becomes cluttered. A messy workshop is dangerous for you, your tools and your projects. It is also very inefficient. You can develop a habit of cleaning up as you work. When reaching for a tool, look at the bench and see if you can put anything away. It is a lot easier than forcing you to stop and do a general cleaning.



WOODWORKER'S SHOWCASE

Showcase your woodwork projects

Members of the Triton Woodworking Club share their projects

The Triton Woodworking Club recently hosted a get-together where members brought in their projects to be featured in *The Home Handyman*. See their amazing work below:



Clive Morris with a Jacaranda plate



Biltong slicer by André Oosthuizen



Geoff du Plessis' display for his 'hole-in-one' ball



By Clive Morris



A jig designed by Linton Lake to cut notch joints



By André Oosthuizen



By André Oosthuizen



By André Oosthuizen

Write to us

Send us pictures of your project.

Write a caption with your name, surname, inspiration, type of wood, etc. and send to editorial@homehandyman.co.za



COFFEE CORNER

From our workshop to yours

Meet the team

Warren Schmidt is a feature writer for *The Home Handyman* magazine. He has a diverse array of interests ranging from DIY to conservation science and recently obtained a Master of Science degree from the University of KwaZulu-Natal.

Tell us a little about yourself and your career

I was born in Johannesburg in 1973 back in the days free from Internet, smart phones, high-speed fibre, e-tolls and digital dominance. I grew up in Kempton Park and after school all the neighbourhood kids would rally around a large compacted sandy mound racing BMXs and generally getting all dusty and muddy, not to mention bruises and the occasional broken bone after wiping out on one of our homemade timber ramps.

My interest in DIY was largely stimulated by my father Robert, who built several houses and carried out major renovations. He worked as an electrician and is now semi-retired. I competed for resources against three younger brothers but found solitude in developing a keen interest in conservation and reptiles. During my later high school years, I started

working part-time at the old Transvaal Snake Park, which was situated in Halfway House, at that time a rural outpost before development obliterated its country charm. After completing high school, I worked at the snake park full-time before taking up a position as farm manager at Kwenza Gardens Crocodile Sanctuary at Sun City. It was here that I honed my DIY and building skills as we had to perform maintenance miracles on a very tight budget.

In the early 2000s I drifted into the world of journalism and wrote my very first freelance article for *The Home Handyman*, which was published in October 2002. It was on fire protection and fire-fighting equipment. I then spent some time with my brother in Australia and New Zealand and on my return was offered a permanent position for a company that produced editorial for a range of consumer and trade publications, including *The Home Handyman*. In January 2006 I took over as editor for THH and edited 39 issues before returning to the world of environmental conservation.

What are your hobbies?

I enjoy outdoor activities, but my hobbies are deeply intertwined with



my research interests in conservation biology, so the dividing line between relaxation and work is somewhat obscured. I have a deep interest in snake conservation, natural history and generally how these creatures live and survive alongside people. As a result, I'm about to undertake my PhD studies focusing on this remarkable but misunderstood group of animals.

How do you find working on THH?

I have a very long history with THH (17 years!) so I could literally write a book purely on the events, people, functions and adventures I've had with this magazine. I enjoy the challenge of researching an article, discovering new products and methods and seeing the final product published. I really wish to see this magazine grow and thrive against the backdrop of change and technology so that it remains relevant to the next generation of DIYers.

Get rid of ants naturally

Natural ant repellent

Did you know that cinnamon is an effective household hack to get rid of ants? Its smell discourages ants from entering your house and scrounging in your kitchen. According to a 2014 study published in

the International Journal of Scientific and Research Publications, cinnamon essential oil yields positive results in insecticidal activity.

- Add ¼ to ½ teaspoon of cinnamon essential oil in a cup of water. Soak a

cotton ball in this solution and wipe down the areas where ants may enter and dwell. Repeat once daily until all the ants are gone.

- You can also put ground cinnamon and whole cloves near entry points.

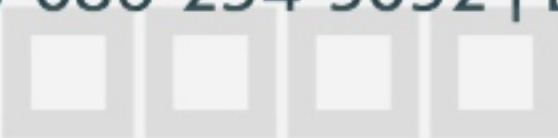
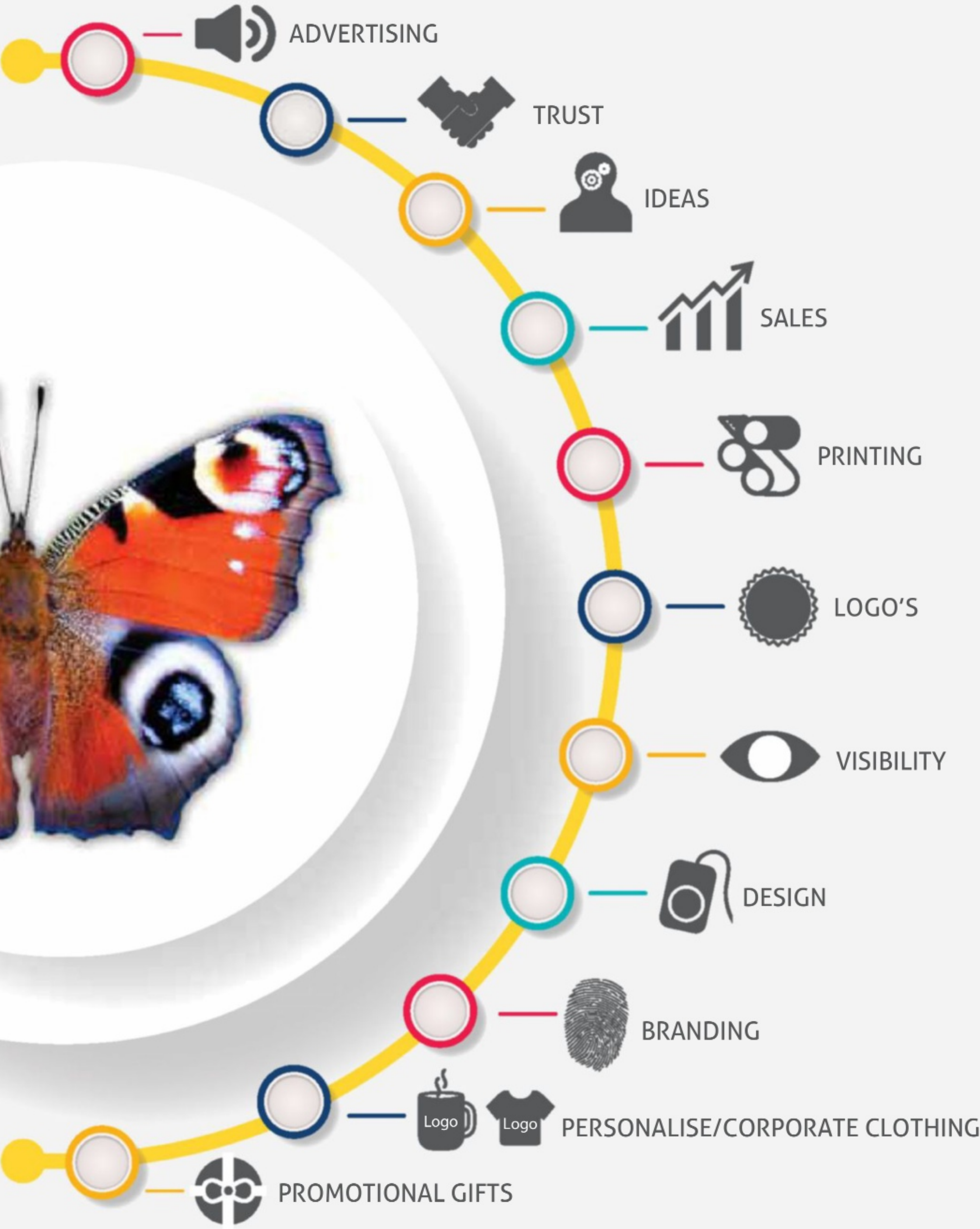
Click and connect

Our website: www.homehandyman.co.za | Go to www.facebook.com/TheHomeHandymanmagazine and 'Like' us
Follow *The Home Handyman* magazine on Twitter @TheHomeHandymanmag





Call for your corporate needs



MISSING AN ISSUE?

To order back issues for only R22 each, use the order form below to obtain previous available editions.
For orders outside South Africa please phone for a quote.

Recent digital back issues can be ordered from the publisher

JANUARY 2012



- Top The Home Handyman projects
- Make a garden archway
- Install a shower

FEBRUARY 2012



- Wall cladding
- Construct a garden gate
- Make a child's rocking horse

MARCH 2012



- Redesign a bathroom
- Build a garden shed
- Install a countertop and sink

APRIL 2012



- Protect and secure your home
- Construct a flower stand
- Install your own cabinets

MAY 2012



- Repair problem plaster
- Install an outdoor light
- Make a wine rack

APRIL 2013



- Underfloor heating
- Woodturning inlay work
- Make a home gym bench

MAY 2013



- Natural stone flooring
- Paint and wall coverings
- Child-safe kid's rooms

JUNE 2013



- Insulate your home
- Make a metal bed
- Energy-saving water heating

JULY 2013



- Cure damp problems
- Make a candle holder
- Trendy concrete floor ideas

AUGUST 2013



- Garden drainage
- Make a garden hose holder
- Waterproof your roof

JULY 2014



- Revamp your kitchen
- Construct wooden bunkbeds
- Build a patio roof

AUGUST 2014



- Garage door facelift
- Make rustic picture frames
- Construct a wendy house part 1

SEPTEMBER 2014



- Jazz up your outdoor area
- Install drip irrigation
- Garden terracing

OCTOBER 2014



- Pools for small gardens
- Prune your plants
- Make a garage trolley

NOVEMBER 2014



- 8 ways to live sustainably
- Harvest rainwater
- Wood protection

• Order these and more online on www.homehandyman.co.za •

YES! I would like to order the following:
(please tick)

- | | | | | |
|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| ☐ Jan '12 | ☐ Jan '13 | ☐ Jan '14 | ☐ Jan '15 | ☐ Jan '16 |
| ☐ Feb '12 | ☐ Feb '13 | ☐ Feb '14 | ☐ Feb '15 | ☐ Feb '16 |
| ☐ Mar '12 | ☐ Mar '13 | ☐ Mar '14 | ☐ Mar '15 | ☐ Mar '16 |
| ☐ Apr '12 | ☐ Apr '13 | ☐ Apr '14 | ☐ Apr '15 | ☐ May '16 |
| ☐ May '12 | ☐ May '13 | ☐ May '14 | ☐ May '15 | ☐ Jun '16 |
| ☐ Jun '12 | ☐ Jun '13 | ☐ Jun '14 | ☐ Jun '15 | ☐ July '16 |
| ☐ July '12 | ☐ July '13 | ☐ July '14 | ☐ July '15 | ☐ Aug '16 |
| ☐ Aug '12 | ☐ Aug '13 | ☐ Aug '14 | ☐ Aug '15 | ☐ Sept '16 |
| ☐ Sept '12 | ☐ Sept '13 | ☐ Sept '14 | ☐ Sept '15 | |
| ☐ Oct '12 | ☐ Oct '13 | ☐ Oct '14 | ☐ Oct '15 | |
| ☐ Nov '12 | ☐ Nov '13 | ☐ Nov '14 | ☐ Nov '15 | |
| ☐ Dec '12 | ☐ Dec '13 | ☐ Dec '14 | ☐ Dec '15 | |

See our website for more recent issues

No. of copies ordered: x R22.00 each = Total R

Name:

Address:

..... Code:

Tel: Cell:

Email: Signature:

Please make a direct deposit / EFT into our bank account:

Account holder: BB Print

ABSA Bank

Branch code: Ben Swart - 632-005

Cheque account: 404-881-8651

Reference: "Sub+HH+ surname + initials" (Example: SubHH-Lindeque, G)

Fax/email the form and proof of payment to 086-234-5052

(Please note: there is an additional fee of R39 if payment is made in cash)

Price valid until 31 December 2019

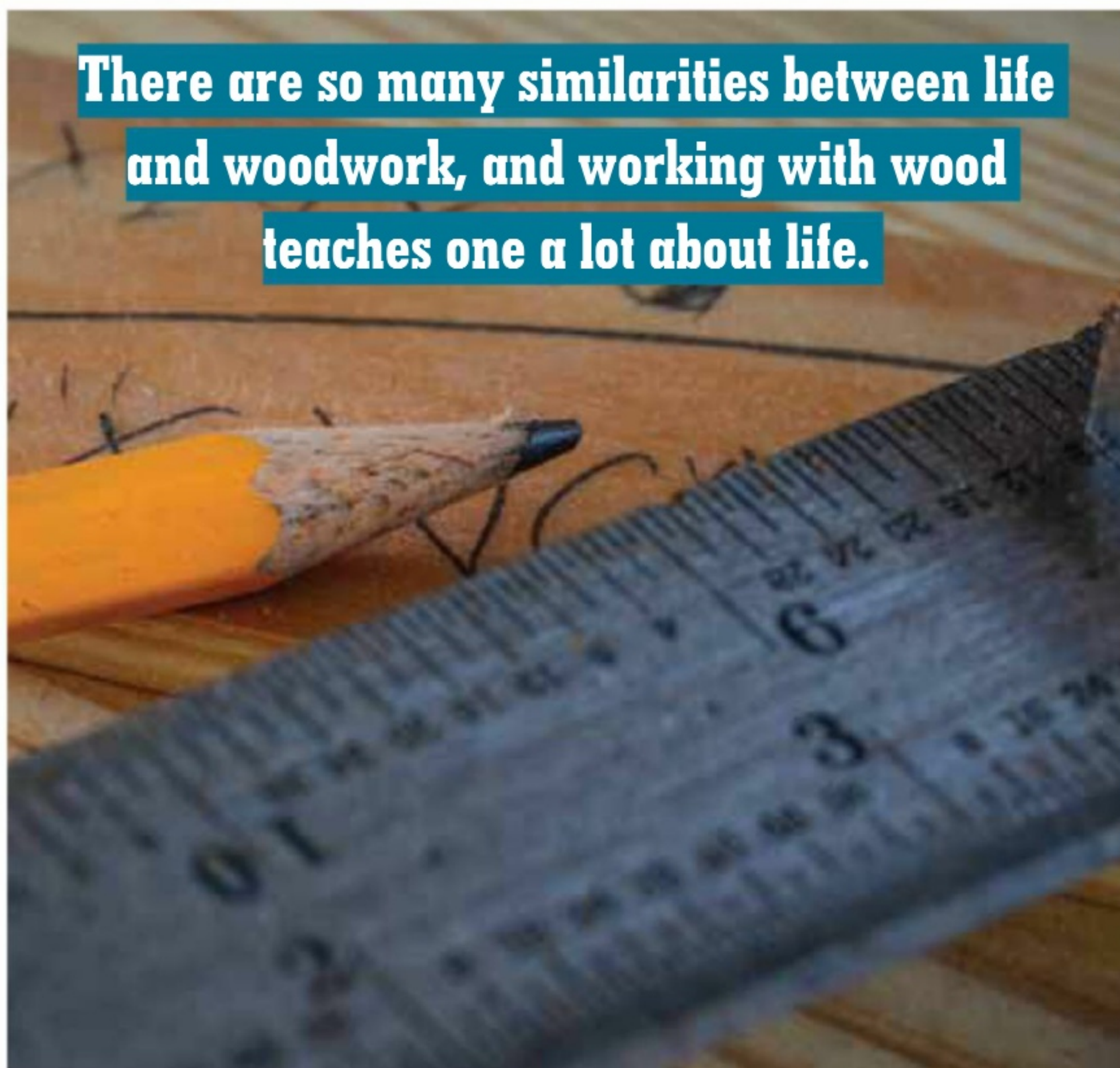
Double check DIY

About Annalien:



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

There are so many similarities between life and woodwork, and working with wood teaches one a lot about life.



One of the first things I learnt when measuring and cutting wood for a project was: measure twice and cut once. I can still hear Peter's voice ringing like a mantra in my head when I pull my measuring tape closer. Peter used to present *Get It Done*, a DIY series on television with me, thus he became my DIY mentor.

For now let's stick to the 'measure twice, cut once' theme. From starting out with your planning, when you are drawing out your design and calculating the measurements to actually cutting the pieces to size, always make sure that it is correct. This is difficult for me with my artistic, abstract brain which is happy with measurements that are close enough to the correct measurement. In woodwork it unfortunately doesn't work this way and having the correct sizes will save you a lot of time, heartache and money. And don't make the mistake of assuming that your wood merchant did the job correctly. Just remember, a millimetre here and a millimetre there can make or break a project. So, the

first thing you should do when the wood is delivered, is check whether all the pieces are there and whether the measurements are correct.

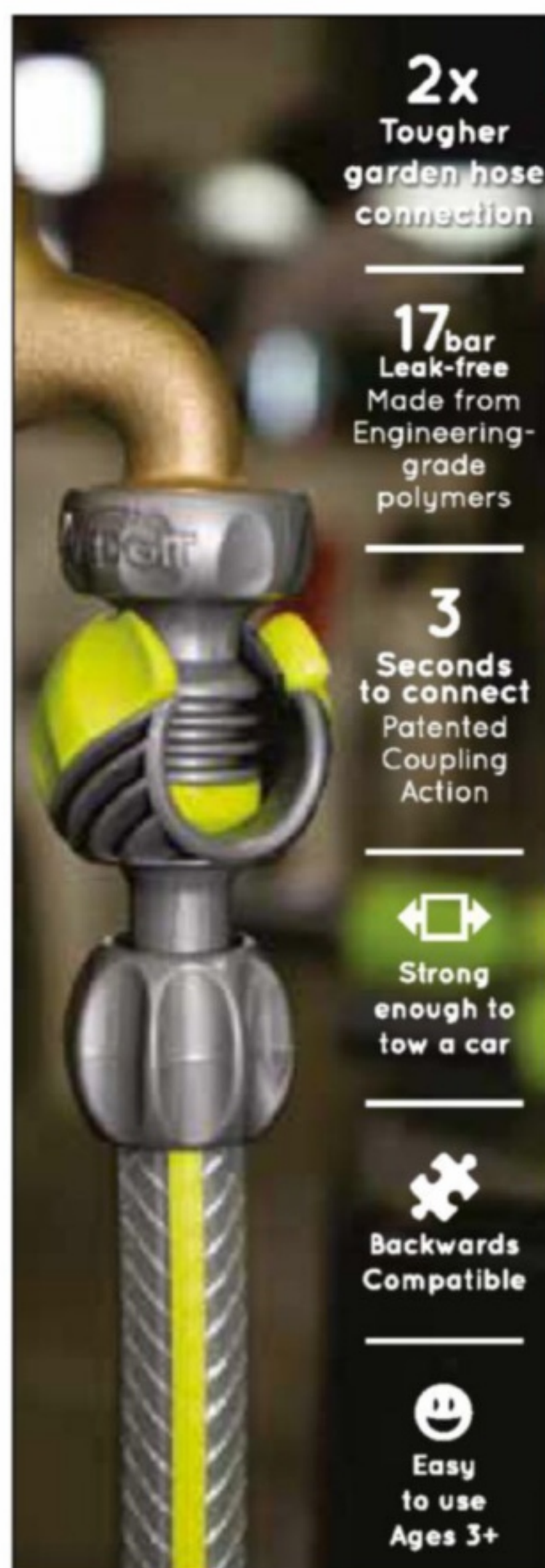
Isn't it the same in life? Never assume that the other person understands your communication as you intended it, or remembers meeting places and times. I can still 'fondly' remember sitting at a venue to meet a friend for coffee and cake, while she was waiting across town at another venue for me... This taught me to always double check and send the venue address via Waze or Google Maps. The most embarrassing thing of all is when your phone rings and it is a colleague waiting for you to attend a meeting and you are sitting in the movies halfway through a highly emotional love story or action movie!

So I have learnt the hard way to double check my meetings early in the morning by sending a message to confirm the time and place. You might think it is a bit extreme, but when you reach my age, it becomes necessary.

>> Annalien Grensemann

This brings me back to DIY and one of the television shows where we made a lovely swinging chair which hung from a beam of the roof. We were in a bit of a hurry to get the final shot of the chair. Peter quickly hung it from the workshop roof-beam and I decorated it with cushions and so forth. The director decided that I should do the goodbye-link sitting in the chair, which I did, but we hadn't double checked... halfway through the link, the knot came loose and the chair came down with me rolling like a ball over the dirty and dusty workshop floor. The crew – trying not to laugh – picked me up and dusted me off. After a good chuckle and a makeup touch-up (and tying a double knot) I ventured back into the chair and could finish my link carefully.

So don't lose face or fall on your bum; always double check or measure twice. And when taking that final shot swinging from a beam of the garage roof, make sure that the rope has a double knot!



Manufactured in South Africa designed by South Africans for local climatic conditions



WEDGIT
A FITTING GARDEN COMPANION



Available countrywide at leading retailers

distributed by
Vermont Sales

New innovative leak-free complete water management system which is
Tough, Simple, Reliable & Easy To Use

For more info and distribution enquiries, Call **Vermont Sales** on (011) 314 7711 or go to www.vermontsales.co.za

AirCRAFT
PNEUMATIC SYSTEMS

**A wide variety of
Pneumatic & standard
system solutions:**

- Spray guns
- air hoses
- adapters
- air tools
- gauges
- adaptors
- quick couplers
- mini compressors
- in-line filters and regulators



For more info and distribution enquiries, Call **Vermont Sales** on (011) 314 7711

www.aircraftair.com

Summer Cool

The Woodoc Way



When it comes to wood, refurbishing is inevitable. **Woodoc Exterior Sealers** make it easy.

hint

Use **Woodoc 45 Tile and Cement Sealer** to give a strong, durable surface finish to pavers.



Woodoc Patio is the easy and effective way to clean and maintain wooden patio furniture and exposed woodwork.



Woodoc DECK Dressing is formulated to protect and treat dense wood decking, such as Balau and Saligna, that does not readily accept a conventional sealer. Tinted for wood colour enhancement, high in UV inhibitors and water repellent, it is ideal for first time treatment and for continued maintenance of decks.



Woodoc
FOOD FOR WOOD™

Our website has full details and "How-to-do"-advice.

Use our new **Woodoc Wizard** to help find your perfect sealer. www.woodoc.help



Woodoc Customer Care: For friendly, personal assistance and advice, phone Toll-Free 0800 411 200, during office hours. Visit www.woodoc.com Woodoc WhatsApp +27 66 302 4702