THE PAINT ISSUE

UPDATES TO THE PAINT RANGE AND WE SHOW YOU
HOW TO MASTER THE CITADEL PAINTING SYSTEM!

THE HORUS HERESY
BETRAYAL AT CALTH
EXCLUSIVE NEW MISSION!

CONTENTS

STROKES OF GENIUS

Welcome to a very special issue of White Dwarf – the painting issue! This week, there's a number of new paints out, and to celebrate this issue is dedicated to helping you get brilliant results from your painting by laying bare the Citadel Painting System, a series of straightforward, effective techniques that will help you furnish your Citadel miniatures with the kind of paint job you can really appreciate and enjoy. We'll show you how each of the main techniques (basecoating, washing, drybrushing and layering) work, along with top tips from the Golden Demon himself, stage-by-stage guides and more besides. Armed with this knowledge of how to use the main Citadel Painting System techniques, you'll be able to paint anything you like to terrific quality. Fabulous armies such as those shown in the photograph above are within your grasp – and we'd love to see them. Why not send us pictures of your painted miniatures to team@whitedwarf.co.uk? Enjoy the issue!

CITADEL DRY

Citadel Dry paints are specially formulated to give the best possible results when drybrushing your models. Now the Citadel Dry range has been expanded with 15 new colours, all matched for consistency with the Citadel Paint System.

CITADEL DRY PAINTS

The new paints on the right are an addition to the existing Citadel Dry range, which already includes 16 colours. All of these are still available, so you'll find a Citadel Dry paint to suit most any colour scheme. You can see the 16 existing Dry paints below, or check out the full range at: games-workshop.com.

Dry: Changeling Pink

Dry: Eldar Flesh

Dry: Etherium Blue

Dry: Golden Griffon

Dry: Hellion Green

Dry: Hexos Palesun

Dry: Kindleflame

Dry: Longbeard Grey

Dry: Lucius Lilac

Dry: Necron Compound

Dry: Praxeti White

Dry: Ryza Rust

Dry: Skink Blue

Dry: Terminatus Stone

Dry: Tyrant Skull

Dry: Underhive Ash

Drybrushing is one of the first techniques that many painters learn, enabling them to capture details and edges on almost any model. The new 15 Dry compounds out this week are: Wrack White, Astorath Red, Hoeth Blue, Chronus Blue, Imrik Blue, Stormfang, Niblet Green, Nurgling Green, Golgfag Brown, Verminlord Hide, Sylvaneth Bark, Dawnstone, Sigmarite, Slaanesh Grey and Thunderhawk Blue.

These new colours will help with will all sorts of painting tasks: Sigmarite is quite literally perfect for that final drybrush highlight on your Hammers of Sigmar or Sanguinary Guard, while Chronus Blue will see all sorts of use on Ultramarines; Niblet Green will get your greenskins looking tip-top and Astorath Red is the perfect rich red for Blood Angels, Khorne Daemons, Evil Sunz and many others. ☠

CITADEL DRY PAINT SET

Containing eight of the most frequently used Citadel Dry paints (as chosen by the Golden Demon) and a hard-wearing S Dry brush, the Citadel Dry Paint Set is a must-have for painters who are building up their paint collection, or those who simply need a restock.

Like all the Citadel paint sets in the range, the Dry Paint Set is designed to give you the core of your collection of Dry paints, providing the colours you're most likely to be using regularly – simply put, its the absolute best way for complete beginners or those expanding their paint collection to equip themselves with the most commonly used paints, ready for a variety of painting tasks. Whether you're painting hordes of Orks, ranks of Stormcast Eternals, Ultramarines, Skeletons, Khorne Daemons or almost any other army, you're going to find the colours in this set, and the S Dry brush, really useful. ☠

CITADEL SHADE

Beloved of painters everywhere, Citadel Shades capture all the intricate details on your models. Designed to emphasise raised textures and add depth and contrast to recesses, they have proven to be a wildly popular addition to the Citadel Painting System, and most painters find they use more Citadel Shades than any other paint in the range. Now they're available in new bigger pots (these replace the existing smaller pots), giving you extra value and twice as much Shade for all your washing needs. So, whether you're giving your Chaos Knights' armour the realistic treatment with a coat of Nuln Oil, adding depth to the sigmarite breastplate of a Stormcast Eternal with a splash of Reikland Fleshshade or darkening the folds of a Skaven's robes with Agrax Earthshade, you've got it covered. With bigger pots than ever before, you'll be painting for longer, and restocking less often. Just give them a vigorous shake and you're off. ☠

With all the new Citadel paints released this week, we've given over the issue to providing you with the essential lowdown on the Citadel Paint System. Whether you're a beginner, an experienced painter looking to tackle new projects or a seasoned veteran looking to mount an assault on Golden Demon, we've got guides, tips and inspiration aplenty. Turn here for the start of our in-depth guide to basecoating, shading, drybrushing, highlighting and much, much more.

MUNITORUM BATTLEPACK CASE HARNESS

Deploy your army to the front lines in style with the new Munitorum Battlepack – a super useful carrying system for your rulebooks, Codexes, dice and even your carry case.

We've all been there – trying to juggle all our figure cases and rulebooks on the way to a game. The Munitorum Battlepack is designed to make all that a thing of the past. At first glance it's a sturdy backpack styled after something a Space Marine Scout might wear, but closer inspection reveals it's also a carrying system for your Citadel Figure cases. Open the webbing straps on the back and you can put in a Crusade Case, two Battle Cases or three Skirmish Cases – meanwhile the main section can hold all your rulebooks, dice and Rangefinders ready for your game. 💀

1

2

3

1 Without a case loaded in, it becomes a compact and handy bag, with awesome Imperial heraldry and standard Departmento safety warnings on it.

2 Once you've loaded your Munitorum Battlepack with your case, and all your books and dice, you're ready for war – it can be worn just like a conventional rucksack. Note the straps on the back, which you can hang Citadel ID Tags (or other useful things) from.

3 The Munitorum Battlepack Case Harness, loaded with a Citadel Crusade Case. The case isn't included, so you can load it with your choice of one Crusade Case, two Battle Cases or three Skirmish Cases.

CITADEL I.D. TAG

Personalise your figure case or Munitorum Battlepack with these specially-designed I.D. Tags, in five classic designs.

It's in the nature of figure cases that they travel – even more so with the release of the Munitorum Battlepack this week, and the Citadel I.D. Tags are the perfect way to make sure they don't get lost. With five designs to choose from – including the four most renowned Space Marine Chapters in the galaxy (Dark Angels, Blood Angels, Space Wolves and Ultramarines) and the Crusade Badge – these tags are designed to show your allegiance and who the case belongs to! On one side you get your preferred Chapter badge rendered in hard-wearing rubber and on the other there's a space to write your name (or scrawl your pack-markings if you're a Son of Fenris). The tag then attaches to your case via the sturdy strap. ☠

CITADEL WATER POT

Wash your brushes (or drink your brew) in style with these Citadel paint-inspired water pots… you'd be a mug to miss them.

Washing your bushes regularly during painting is absolutely essential if you want to achieve the best results. Not only can leaving paint on the bristles of your brushes for too long risk ruining them, but unless you clean every brush between colours, there's the risk of contamination.

While you could use an old yoghurt pot for such a noble duty, what you really want is a mug – that is, ahem, a water pot – bearing the name and colour of your preferred Citadel paint. They are available, while stocks last, in Waaagh! Flesh, Khorne Red, Retributor Armour and Leadbelcher. These also make excellent mugs for tea and coffee breaks – just don't drink your paint water! ☠

CITADEL PROJECT PAINT SET

The best way to kickstart your Citadel paint collection, the Citadel Project Paint Set combines the ultra-practical Citadel Project Box along with a whopping 49 Citadel paints and four Citadel brushes. Everything you need to start honing your skills.

Containing 49 of the most commonly used Citadel Paints (including 11 Base paints, eight Shades, 10 Dry paints and 20 Layer paints) and four Citadel brushes (S Base, M Shade, S Dry and S Layer), the Citadel Project Paint Set is sure to get your painting escapades off to a roaring start.

This all comes in a Citadel Project Box – a hard, plastic box, purpose-built to help organise your modelling and painting projects, with a tray to hold all the paints, space for tools, brushes, glues and spare parts, and a reversible lid that also serves nicely as a painting surface, with space for a Palette Pad. You can even clip the lid on to the Project Box and paint on your lap. ☠


CITADEL PROJECT BOX
49 PAINTS
4 BRUSHES

CITADEL RANGEFINDER

Quite simply the most glorious measuring device Games Workshop have ever made, we present the Citadel Rangefinder.

A measuring implement is something every general needs in battle, and the Citadel Rangefinder is the best one we've ever seen. At its heart it's a quality tape measure (marked in inches) made from sturdy, sigmarite-effect metal, but it's also much more than that. The outer casing is embellished with the hammer and bolts motif of the Stormcast Eternals – the detail on this has a wonderful tactile quality, which combines with the sigmarite sheen for a fantastic high-quality finish. The tape measure itself is marked in inches, with special detailing at the 3", 12" and 18" marks, the distances most commonly used in games of Warhammer Age of Sigmar. This is a gaming accessory that is as useful as it is good-looking. ☠


1. The Citadel Rangefinder, a quality tape measure with a superb Warhammer Age of Sigmar look – designed to match the existing Combat Gauge and Dice Shakers.

2. The tape is tough metal – treat it nicely and it will last. It is also specially marked at the 3" point for piling into close combat, and the 12" and 18" marks for ranged and magic attacks. The most impressive tape measure we've ever seen.
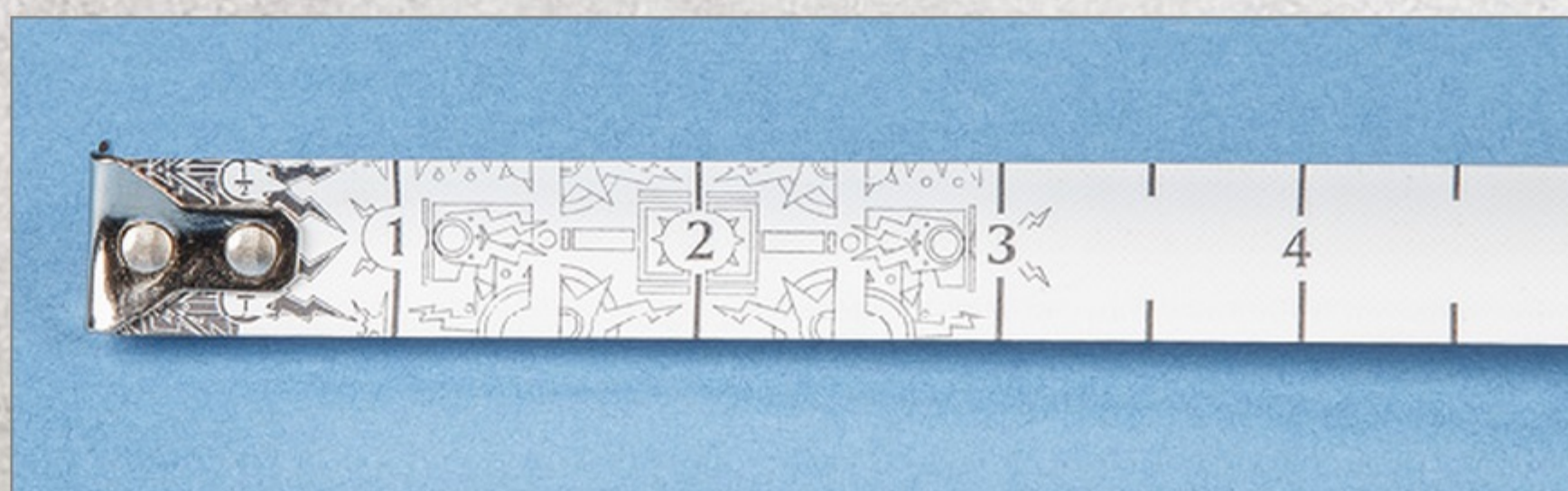
LEGENDS OF THE DARK MILLENNIUM: ULTRAMARINES
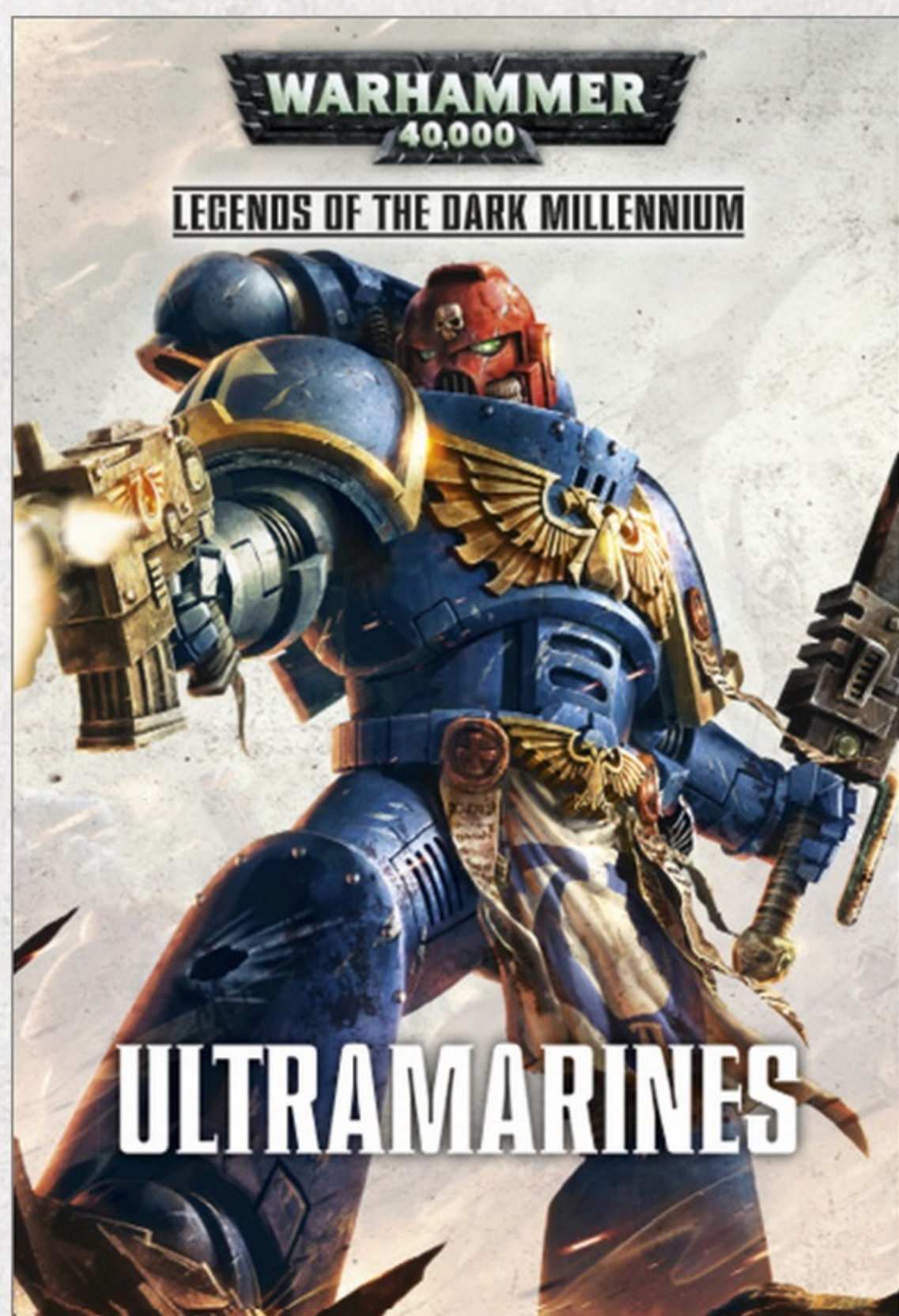
The Ultramarines Chapter have a long and glorious history of service to the Imperium of Man.

Among the heroes of the Adeptus Astartes Chapters, no can claim greater accolades nor more victories than the heroes of the Ultramarines Chapter.

Legends of the Dark Millennium: Ultramarines is a compilation of nine short stories by some of the Black Library's biggest names, each devoted to these blue-armoured heroes. These tales include many well-loved Space Marine classics, such as Gav Thorpe's 'Catechism of Hate', all about Ortan Cassius, and Graham McNeill's 'Lord of Ultramar', which gives us a glimpse into the burdens borne by Marneus Calgar himself. This book is the perfect companion for any collector who wants to get to grips with the history and heritage of the sons of Ultramar. 💀

These Black Library books are also available as eBooks. For more information visit: www.blacklibrary.com

DAEMON WORLD

By Ben Counter | Paperback | 416 pages

In *Daemon World*, a Black Library classic returns to print. *Daemon World* is an ultra-violent epic that tells the story of the stricken planet, Torvendis – a world within the dangerous region of the galaxy known as the Maelstrom and now wholly in the grip of the Dark Gods. As the dark rulers of the planet vie for power, and a coterie of deadly Word Bearers Chaos Space Marines arrive, the ultimate battle for the fate of Torvendis begins.

Daemon World stands out as a masterpiece of madness – staggering in scope, spectacular in violence with a secret within it that is genuinely shocking. 💀

SANCTUS REACH

By Various Authors | Paperback | 416 pages
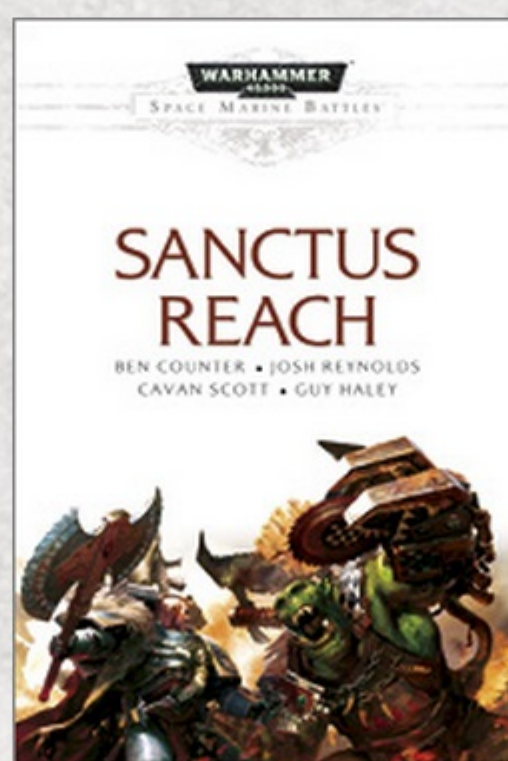
Sanctus Reach was the location of one of the greatest battles fought between the Imperium of Man and the Ork menace, as Imperial Knights, Astra Militarum regiments and even the Space Wolves Chapter fought against the Red Waaagh! of Grukk Face-rippa. This newly-minted paperback, also entitled *Sanctus Reach*, collects the previously published stories from that war into one place. Combining stories from Ben Counter, Josh Reynolds, Guy Haley and Cavan Scott, *Sanctus Reach* is an unstinting glimpse into the murderous war unleashed upon the Sanctus Reach System and the heroic warriors and villainous Orks who fought there. 💀

ALSO AVAILABLE

SILVER SKULLS: PORTENTS
The Silver Skulls Chapter rely on mysticism and prognostication to predict victory for their forces. In this story, Sarah Cawkwell sets them on the path for war against the Traitor Legions. Originally released as an eBook, *Silver Skulls: Portents* is now available as a paperback which you can buy online at blacklibrary.com.

THE CITADEL PAINTING SYSTEM

Painting Citadel miniatures lies at the heart of the Games Workshop hobby, an essential element of making the most of your miniatures collection. In this feature we examine the Citadel Painting System, and show you how you can use it to achieve fantastic results.

One thing that unites almost every collector of Citadel miniatures is the desire to own beautifully painted armies of our favourite miniatures, whether to conquer all before them on the battlefield or simply admire.

To help with this universal goal, Games Workshop has created the Citadel Painting System, a revolutionary combination of techniques, tools and paints that makes painting straightforward, easy to learn and most importantly fun! Using the Citadel Painting System, you choose the colours you want to paint your models, select the techniques you want to use

on them, and apply these in a few simple steps for what will be some great results. This issue, we're going to take you through it, step by step, technique by technique.

To explain it all, we've included advice from the Studio army painters and the 'Eavy Metal team. The army painters create the vast armies and comprehensive painting guides you see in our publications, while the 'Eavy Metal team use years of hard-earned skills to produce individual masterpieces that showcase our Citadel miniatures. Read on…

CITADEL PAINT SYSTEM TECHNIQUES

TECHNIQUE 1: BASECOAT   SEE HERE

The foundation upon which the entire painting system is based, a well-applied basecoat gives your model a smooth starting point for later stages. Basecoats use Citadel Base paints, with their high pigment content and excellent coverage.

TECHNIQUE 2: WASH   SEE HERE

Washing is a technique that brings out all of the subtle details and textures on your model using Citadel Shades. Formulated to flow into recesses, Citadel Shades provide natural, effective shading and define details on your miniatures.

TECHNIQUE 3: DRYBRUSH   SEE HERE

Drybrushing is an excellent technique for capturing raised details and creating natural highlights on models, especially those with a lot of small details or sharp edges. Citadel Dry paints are designed to make this much-loved method of painting as straightforward as possible.

TECHNIQUE 4: LAYER   SEE HERE

Layering is the method by which painters use increasingly lighter colours to create highlights on the raised areas of models or add layers of lighter colour. Citadel Layer paints are formulated with a certain opacity so they can be applied over Base paints and each other with great results.

CITADEL GLAZE PAINTS

Glazing is an advanced technique that many experienced painters use to great effect on their miniatures, primarily to intensify an area of colour. Citadel Glazes are special washes that can make the basecoats and layers on your models really stand out, or unify areas on your models where the colours might other be a little too bright or the layering too stark.

Citadel Glazes are also designed to sit on the miniature where they are applied, unlike Citadel Shades, which will naturally flow into the recesses on a model.

We look at glazing in more detail here.

CITADEL TEXTURE PAINTS

A miniature is never truly finished until it has been based. Citadel Texture Paint is the perfect way to ensure all the bases in your army have brilliant, consistent finishes.

Citadel Texture Paint can be applied directly onto the bases of your painted models, and it quickly dries leaving an effective, contoured finish, which you can either leave just as it is, or shade and paint like any other part of the model.

Check out here where we look in more detail at how to do this.

CITADEL TECHNICAL PAINTS

Technical paints are designed to help you achieve a range of effects, from creating rust and corrosion to the foetid slurry of Nurgle's Rot or the bloody gore of Blood for the Blood God. The range also includes Agrellan Earth and Martian Ironearth for creating dry, cracked ground. You'll find all this and more here.

TOOLS OF THE TRADE: CITADEL BRUSHES

The Citadel range of brushes has been designed from the ground up by our Studio painters, specifically for use with the Citadel Painting System. Each brush works with a particular technique, so you can get the best results whatever model you are painting.

BASE
Base brushes have tough-wearing bristles designed to survive the rigours of basecoating your models. There are four sizes (S, M, L and XL) so that you can tackle any painting challenge. You'll notice the larger brushes have a broad, flat head, which is perfect for ensuring your basecoat covers your models, while the thinner, chisel-like ends are ideal for painting neatly up to the edges of areas.

DRY
Drybrushing is an unusual technique in that it can be quite hard on your brushes, so the Dry range are made to be rugged and durable.

LAYER
Layer brushes are perfect for applying layer paints. This tends to be precise work, and they have fine heads and soft bristles accordingly.

SHADE
There are two Citadel Shade brushes, the M and XL. Both have bristles designed to hold the maximum amount of Shade, improving the flow of the Shade as you wash your models. For most tasks you'll want to use the M Shade brush: the sharp point allows you to apply washes accurately. The XL Brush is for the largest models.

GLAZE
Glazing tends to be quite precise, so the Glaze brush has synthetic bristles to keep its point while you work.

TEXTURE
The M Texture tool is a spreader for applying Texture paints to your models. Use the large end to scoop the paint from the pot, and the narrow end to spread.

SCENERY
The Citadel Scenery brushes are extra large brushes with coarse bristles – as you'd imagine, ideal for scenery.

BASE BRUSHES
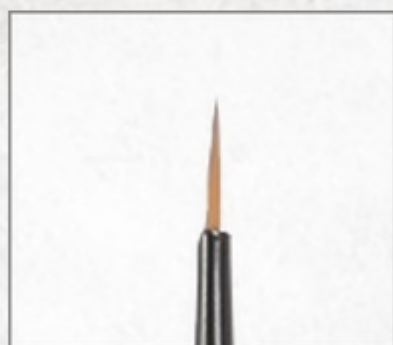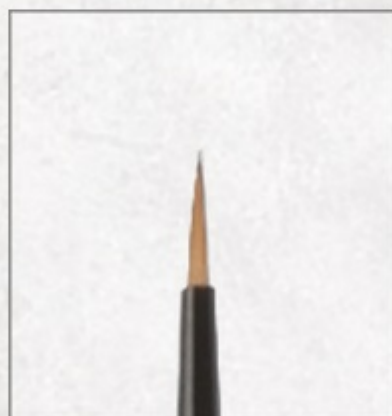
S Base | M Base | L Base | XL Base
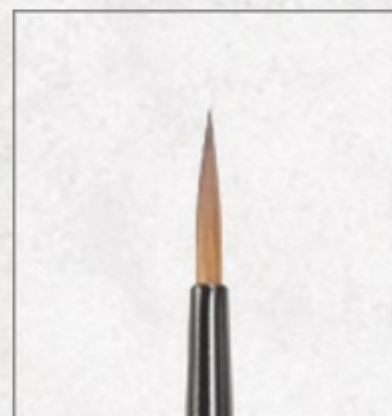
DRY BRUSHES

S Dry | M Dry | L Dry

TEXTURE

M Texture

LAYER BRUSHES

XS Artificer Layer | S Layer | M Layer

SHADE BRUSHES
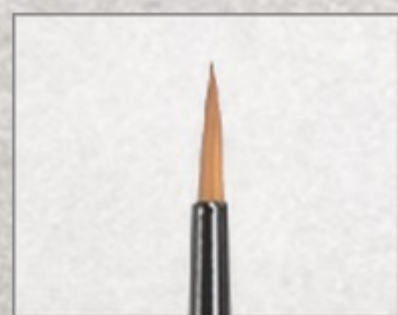
M Shade
L Shade

SCENERY BRUSHES

L Scenery | XL Scenery

GLAZE BRUSH

M Glaze

UNDERCOATING

Undercoating helps paint adhere to your models and also helps prevent it rubbing or chipping off. Most people use an undercoat spray, enabling them to undercoat whole units quickly and neatly.

There are two undercoat sprays in the Citadel range, Chaos Black and Corax White. If you're new to using a spray paint, make sure you read the instructions on the can carefully before you start.

When undercoating models, do it outside in a well-ventilated area and well away from things you value (such as your car or pets). We recommend using a spray stick (see right) to hold your models, enabling you to get the spray into all the nooks and crannies on each model without touching them during the spraying process.

Before spraying, shake the spray can for at least two minutes so that the paint and propellant mix properly. Less than this and you could end up with streaky paint, a cloudy finish or, worse, a totally ruined model. It's worth reiterating: two minutes, no less! Always keep the spray can upright, too, otherwise the spray mix may come out inconsistently.

When spraying your models, a quick burst of the spray can (less than a second) from around 20 to 30cm is more effective than a prolonged barrage at closer range, which can obscure the details of your models and leave them dripping with paint. Work around the model, undercoating it in short, quick blasts until the whole miniature is evenly undercoated. Again, the spray stick is handy for this as it helps economise on how much paint you use and enables you to turn the models around without having to handle them, which would risk smudging the undercoat.

Lastly, when you're done undercoating your models, clean out the nozzle of the spray can by turning it upside down until only gas comes out. This prevents the nozzle clogging and ruining the can.

The Space Marine on the left was undercoated with Corax White spray, while the model on the right was undercoated with Chaos Black spray. A white undercoat is great for models with a bright or light colour scheme, such as those wearing white, yellow or orange. A black undercoat is ideal for darker miniatures, those predominantly painted in blue, green or silver, for example.

For our spray sticks we use a piece of wood about two feet long. Stick a strip of double-sided tape along the top and gently attach your models to it, leaving a little space between them. Secured in this way, the spray stick can be held at any angle so you can spray every part of the models. We recommend wearing a latex glove on the hand holding the stick to avoid undercoating your fingers.

Sometimes, such as when it's cold outside, you may want to undercoat a model by hand. For this you'll need a pot of Imperial Primer and the largest Base brush you can use for the task. Simply apply the Primer like you would a basecoat.

OPTIMAL CONDITIONS
Avoid spraying if it is too hot or cold outside. Too cold and the paint will struggle to dry, leaving it uneven and streaky. Too hot and the paint particles will dry before they reach your model, making the paint grainy (shown below). Between 15 and 25°C is ideal.

TECHNIQUE: BASECOATING

A basecoat provides the first layer of paint you apply to a model after the undercoat and forms the foundation of every other colour on the model – indeed, the foundation of the entire paint job itself – so read on for the essentials and a few top tips from the masters.

Basecoating is the first painting technique you'll apply to your miniatures and, if done well, will make painting your models much easier and even more enjoyable. Many painting frustrations can be alleviated with a neat, smooth basecoat right from the start.

There are four Base brushes in the Citadel brush range. Always use the largest one you can for the job. Not only does it make painting easier, it also makes it much neater. The Space Marine to the right was painted using an L Base brush and took only a couple of minutes to basecoat. While there is a temptation to use the paint straight out of the pot, always water it down. Firstly, this stops you applying the paint too thickly. Two thin coats of paint are better than one thick one – a mantra you will read often throughout this article. Remember, you can always put more paint on a model but you can't take it off. Secondly, a dab of water stops the paint drying out on the palette, which can make it go thick and tacky, leading to a lumpy, uneven basecoat. 💀

1. When getting paint out of the pot, use your brush to take a small amount from the lid rather than dunking the brush into the pot itself.

2. Put the paint on a palette pad and mix in about half as much water as there is paint. Pulling the brush towards you, coat the bristles in paint.

3. As mentioned in the brushes section, never get paint on the ferrule. An even application halfway up the bristles is easily enough paint.

4. Using the flat of the brush, the basecoat (in this case Macragge Blue) is applied to the model in smooth, even coats.

5. The thin edge, rather than the wide flat side of the brush, can then be used for smaller areas of the model such as the hands.
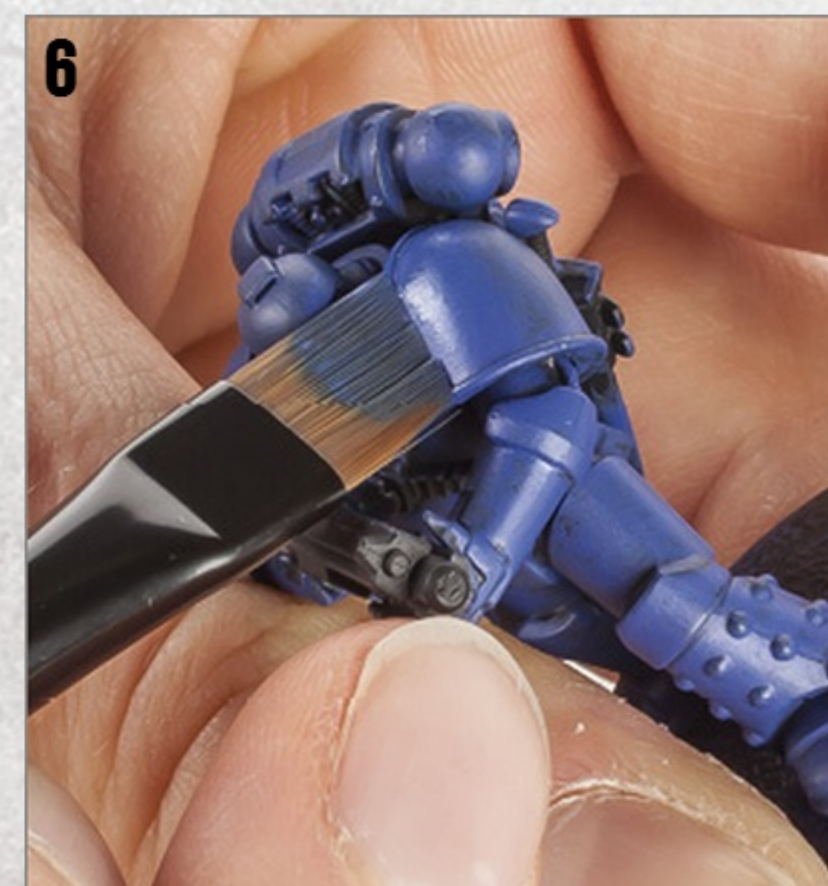
6. Once the basecoat is dry, check it for any streaky areas and re-apply the colour to get a smooth, even finish. Job done!

BASECOAT SPRAYS

Basecoat sprays are an excellent way to basecoat a whole unit (or even a whole army) in a fraction of the time it takes to do it by hand. The principles of using them are the same as with undercoat sprays: use them sparingly in the right conditions and you'll get a great-looking squad of in no time. Like undercoating models, we recommend basecoating a batch of miniatures in one go rather than individually, saving you both time and money. You can find the full range of basecoat sprays on the Games Workshop website.

CITADEL
RETRIBUTOR ARMOUR
MODEL PAINT

DANGER:
VAPOR HARMFUL.
EXTREMELY FLAMMABLE.
CONTENTS UNDER PRESSURE.
IRRITANT.

Net contents 10.3 OZ / 292g

THE GOLDEN DEMON'S TOP TIPS

Use a basecoat spray: If your miniatures are predominantly one colour (such as Space Marines and Stormcast Eternals), use a basecoat spray. It's much quicker than basecoating by hand, leaving you more time to slay your enemies.

Use the correct brush: Base brushes are heavy-duty synthetic brushes designed for the rigours of regular basecoating. The large ones are perfect for big areas, while the smaller ones are ideal for smaller details. We used the M Base brush to basecoat this Space Marine's bolter with Abaddon Black (1).

Multiple basecoats: Some people prefer to basecoat all the colours on a model (2) before moving on to shading, drybrushing and layering. Others prefer to basecoat an area and paint it to completion. The best way to decide which approach to use is to look at your colour scheme and see how you can economise on your painting. This Space Marine, for example, has three basecoats: Macragge Blue, Leadbelcher and Abaddon Black, which can all be shaded with Nuln Oil at the same time.

HEAVY METAL
Metallic paints such as Leadbelcher and Retributor Armour contain tiny particles of metal to make them sparkle and shine when applied to your model. After using a metallic paint, make sure you thoroughly clean your brush and change the water in your water pot to avoid the metal flakes contaminating your other paints. Some people have two water pots on standby, one for watering down regular paints, the other for cleaning brushes after using a metallic paint.

STUDIO COLLECTION
These Stormcast Eternal Liberators painted by the army painting team are a great example of how important a basecoat is to a finished miniature. The basecoat in this case is Retributor Armour, which was applied in two thin layers using an L Base brush over a Chaos Black undercoat (you could use Retributor Armour spray). Not only does it give great depth to the recesses of the model, it also makes applying the first Layer paint – Auric Armour Gold – much easier as its thinner consistency would struggle to cover the dark undercoat. You can find out more about Layering here.

Washing your models with Citadel Shades creates areas of rich, darker colour that accentuate the natural shades on the miniature – perfect for capturing all that detail. You might have heard that before, but Shades can do much more than that. Read on…

Citadel Shades are much thinner than other Citadel paints, specially formulated to flow into the recesses and around the details on your Citadel miniatures. The perfect follow-up to a good basecoat, this technique of washing provides your miniatures with effortless, natural shade. Washing is a very simple technique to use and provides fantastic results on almost any model, from the largest tanks and war machines to the tiniest Skaven or Nurgling.

Typically you will apply a wash before you begin layering or drybrushing your model – as it settles into the recesses and around the details of your model, it will make those areas look more pronounced. Sometimes you might use a Shade later on in the painting process, which can be useful for staining the layers of paint below. Either way, there are three main washing techniques: all-over washes, section washes and recess washes. The first two cover large areas of the model, either all of it or particular areas, while a recess wash focuses on neatly shading specific recesses.

Citadel Shade brushes have bristles designed to hold plenty of Shade, so you can apply the wash simply by painting it on; as you press your brush against the model, the Shade will flow out, and you can use your brush to move the Shade around the model to where you need it.

Because Shades are much thinner than other paints, they will take longer to dry. Factor this in when you are painting – once you've applied your wash, set the model to the side for half an hour or so. While one model dries you can be painting another. Don't be tempted to use a hair dryer to speed things up, as this can change the way the wash dries or even push it out of the recesses. 💀

1 Before you use any Citadel Shade, make sure the lid is firmly closed and shake it vigorously to ensure the flow medium is well mixed in.

2 Use your M Shade brush to take Shade from the pot and transfer it to your palette. Do not water Citadel Shades down.
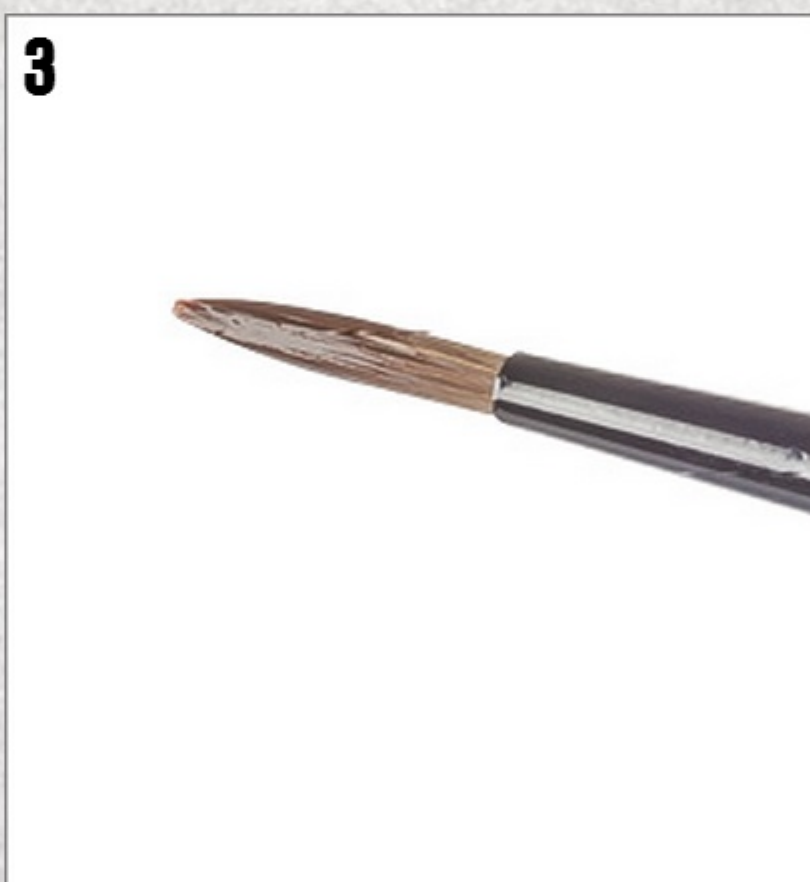
3 When you apply Citadel Shades your brush should not be overloaded – you are looking for a saturation like this.

4 Apply the Shade to your model in a painting motion, using the brush to ensure it flows into all of the recesses and over the details.

5 Sometimes you only want to shade the recesses of a model. In these cases, use a smaller brush and paint more precisely.

6 Once you have applied the Shade, give it plenty of time to dry. As you can see here, as it dries, it leaves rich colours in all the crevices.

THE GOLDEN DEMON'S TOP TIPS

Shake It Up: Listen to the mortals when they say to shake up your Citadel Shade. If you don't, it might dry a little shiny.

Diluting Citadel Shades: Sometimes you will want your wash to be a little lighter. Don't water it down! Instead, use Lahmian Medium to dilute it. Lahmian Medium is a paint without pigment, so the wash will retain its colouration. Water can cause it to dry with a 'frosty' finish.

Prevent Pooling: When you are applying Citadel Shade, you'll sometimes find it pooling in the recesses of your model. If it dries like this, it will look awful (1). Prevent this by using your Shade brush to soak up a little of the Shade back into the bristles. Capillary action ensures that the excess will soak up into your bristles (2).

Avoid Tide Marks: Complete the wash on an area of a model without stopping. If you stop part way through it creates a 'tide mark', which is hard to get rid of, so wash the whole area before the Citadel Shade starts to dry on the model. Then wash your brush and start on the next part.

LAYERS OF SHADE

Citadel Shades can be applied over each other if you want to achieve different results — this can be handy if you're trying to paint models such as Nurgle Daemons, where a wash of Agrax Earthshade and a wash of Athonian Camoshade can combine to give you fantastic results.

If you want to apply more than one wash to your mode, it's important to let the first dry fully before you apply the next — applying a new wash while the previous one is wet can make a mess.

STUDIO COLLECTION

The Studio army painters used a variety of Citadel Shades on these Putrid Blightkings to emphasise their recesses and stain the basecoats beneath — in fact the majority of these models were painted with Citadel Shade, from the pallid green flesh that bulges out between their armour plates, which was washed with layers of Athonian Camoshade, Biel-Tan Green and Seraphim Sepia (sometimes before the previous shade had started to dry) to the tainted weapons and shield rims. Even the off-white plate armour the Blightkings are wearing has been shaded with Seraphim Sepia applied across the whole armour plate and Agrax Earthshade in the deepest recesses to give it a stained and greasy finish.

Drybrushing is a fantastic technique for quickly capturing all the raised details on a model and providing subtle and effective highlights. Here we show you the essentials and how the Studio painters use drybrushing to take their own paint jobs to the next level.

Drybrushing is a technique beloved of painters everywhere, useful for everything from highlighting the edges of tank hulls and Dreadnought armour plates to Skaven fur and chainmail armour. Essentially, the technique consists of rapidly brushing your Dry brush against the detailed areas of a model to capture all the raised details with a light dusting of paint.

Drybrushing is very simple, as you can see in the stages presented on the right. Basically, having loaded your brush with Dry paint you proceed to wipe most of it off on a piece of tissue or paper towel. This leaves you with a small amount of very 'dry' paint on the bristles. As you brush the bristles against the models, you'll see the paint transfer. The longer you brush, the heavier the coverage will be. When it seems like you are running low on paint on your bristles, you simply reload your brush with more paint, wipe off the excess and start again.

The beauty of drybrushing is that the results are instant. You can gauge the effect as you go and decide if the coverage is sufficient, and the highlight light enough, or whether to continue drybrushing. Because of this, drybrushing is often the stage where you can see the paint job come to fruition, highlights appearing over areas of deep colour and the model nearing completion. 💀

HARD WEARING BRISTLES

Drybrushing is very hard on your brushes. If you try using a Layer or Base brush for drybrushing, you'll quickly find the bristles snapping off and splaying. In no time, you'll have ruined a perfectly good brush. We can't stress this enough: always use a Dry brush for drybrushing.

1 First load some Dry paint onto your brush. There's no need to take too much paint – just use a little at a time.
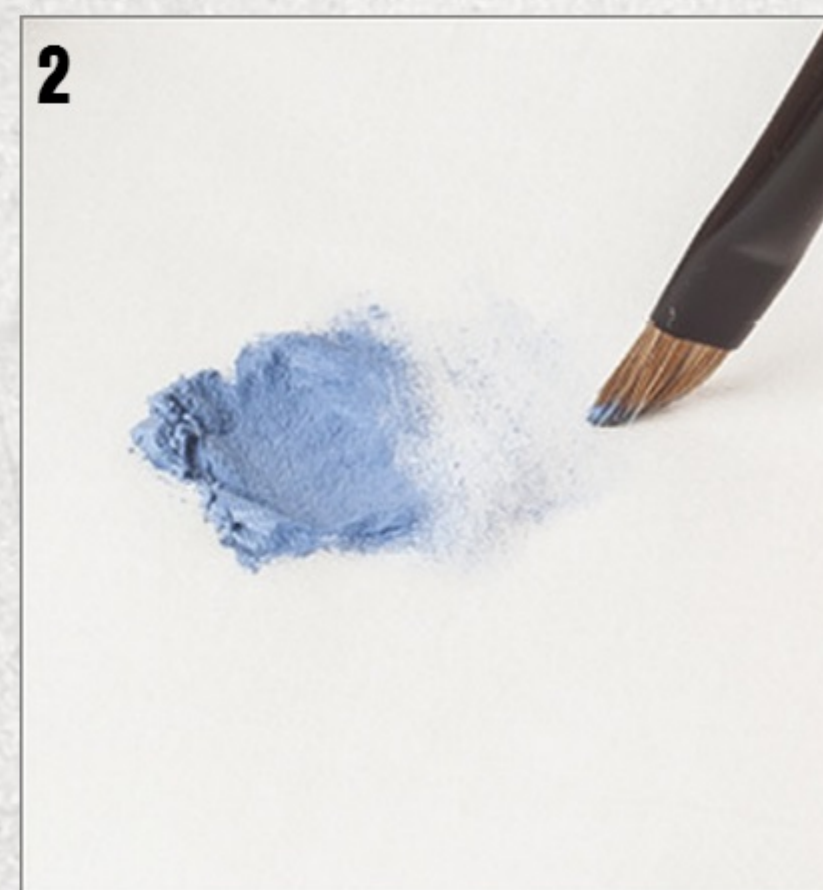

2 Wipe off the excess paint from your brush on a piece of tissue or paper towel. You should remove almost all of the paint, as shown here.

3 With the paint removed, your brush should look like this. You can see a little paint remaining in the bristles – this is enough for drybrushing.

4 Next, gently brush the bristles against your model in a quick back-and-forth motion to transfer the paint to your model – like so.
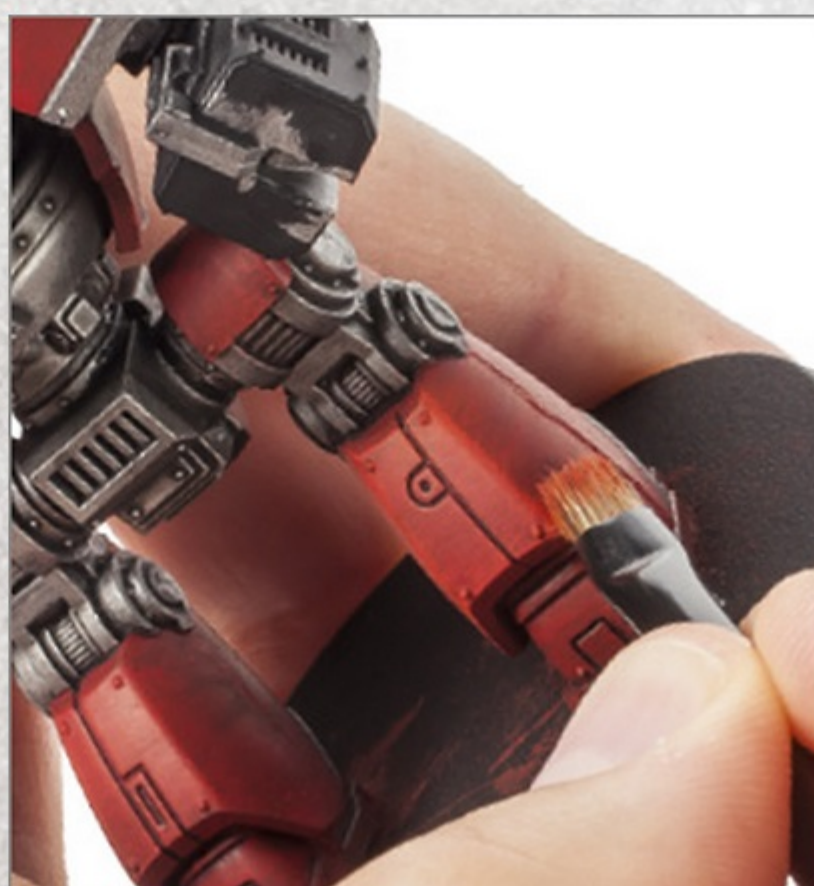
For models with large, flat areas don't drybrush the whole surface. Instead, use an S Dry brush and focus only on the edges.

By using lighter colours, you can do incremental highlights with Dry paints – here Hexos Palesun follows Astorath Red.

THE GOLDEN DEMON'S TOP TIPS

Wipe off the Excess: Listen well mortals! The most important part of drybrushing is wiping off most of the paint from your bristles. If in doubt, wipe off more than you think – you can always add more paint, but it's very hard to take it away.

Dry your Brush: If the bristles on your brush are wet, your drybrushing will become a horrible, smudgy mess (1). Prevent this by drying your bristles off on your tissue by wiping it gently back and forth, before you use it again (2).

Rapid Brushing: The key to drybrushing is all in the action – you're need to get a rapid back-and-forth motion, so that the bristles of your brush are wiping against the surface you are drybrushing. Don't press too hard – it's actually better to be a little too gentle. Check out our online painting guides to see it in action: youtube.com/user/GamesWorkshopWNT

Avoid Brush Murder: Seriously, only use Dry brushes for this task. Drybrushing will wreck Layer and Base brushes faster than a Gnasher Squig in a Snotling enclosure.

BEWARE THE MESS

Drybrushing, with all that brush waggling can be quite messy. You'll often find you get a bit of the Dry paint onto other nearby surfaces.

One way to prevent this being a problem is to do all your drybrushing before you use other painting techniques. That way you can paint over any mess as you do further basecoats and layers. You can also keep things as tidy as possible by using smaller Dry brushes in confined areas. Of course, practice will make perfect – so get stuck in!

STUDIO COLLECTION

The Studio army painters painted this XV8 Crisis Team for the Tau Empire Armies of Expansion guide (which is available in paperback and for iOS and Android). Throughout the stage-by-stage examples in the book, they used careful drybrushing to get realistic highlights on the edges of the armour plates on the Fire Warriors and battlesuits.

As you can see here, the final result is great, just the kind of technique you can use to paint, models, squads and even entire armies. What improves the results of these models is the additional use of layering to paint chips and scuffs onto the armour, as well as Tau Sept markings – the perfect example of the army painting team at work.

Layering is a painting technique designed to bring life and realism to your miniatures by accentuating the raised areas of a model. Done well, the end result is a beautifully painted model with natural-looking highlights that really stands out on the battlefield.

There are two main techniques to layering: the solid layer and the highlight. A solid layer, as shown in image 3 to the right, is designed to cover a whole section of a model while leaving the basecoat and wash in the recesses. This has the dramatic effect of changing the colour of a model. Because Layer paints have a thinner consistency than Base paints, applying a Layer in this way may require several coats of paint to cover the darker colour beneath. Just like basecoating, two thin layers are better than one thick layer – take your time, apply your Layers neatly and you'll get a smooth, even finish.

Highlighting is another form of layering, designed to simulate the effect of light on your miniatures. Light naturally catches the top areas and edges of an object, which is why highlights are only applied sparingly to a miniature and normally only to raised areas as shown in images 4 to 6. A final highlight to a sword or face is often the last technique to be applied to a miniature, the culmination of all your hard work and a moment to be relished.

Gently rotate the brush when drawing paint from your palette. This will help you keep the tip of the brush as fine as possible.

Ensure there's not too much paint on your Layer brush. It should be evenly distributed across the bristles.

When layering large areas, always try to keep the brush strokes in the same direction to minimise streaks and patchy sections.

Apply the highlight to the edges of each area. Be sure to wash your brush regularly so as not to let paint dry in the bristles.

For highlights along the edge of a detail (such as an armour panel), use the edge of the brush as it will give you better control than the tip.

Apply a final highlight, but only to the raised areas of the model. This simulates where light would naturally fall on a model from above.

NATURAL TRANSLUCENCY

Layer paints have a lower pigmentation than Base paints, which means they are not as opaque. When applied over a basecoat (in this example, Auric Armour Gold over Retributor Armour), the basecoat will often still be visible underneath the Layer paint. This is actually a very good thing as you can apply several Layers to build up the highlights gradually, creating a smooth transition between the dark basecoat and the lighter highlights. Even without a final edge highlight, the effect here is striking.

THE GOLDEN DEMON'S TOP TIPS

Write it down: If you're following the Painting System poster (and why wouldn't you – I wrote it and it's excellent), your colour scheme is already written out for you. If you create your own colour scheme, though, always write it down. That way you'll never forget the paints you used.

Not so small: Highlights on miniatures are normally pretty tiny, but don't be tempted to go straight for the XS Artificer brush. All the layering on the Liberator to the left was done using only an M Layer brush.

Painting inside out: Finding small areas like Space Marine knee pads hard to edge highlight? Paint the whole area with your chosen Layer paint and then re-apply the basecoat in the middle, leaving the Layer around the edge **(1)**.

Use colour contrast: You don't always need to edge highlight every part of a model. The contrast between two colours next to each other is often enough to do much of the work for you **(2)**. The grey and white armour on this Tau Breacher painted by 'Eavy Metal is a great example of this.

MIX UP THE ORDER
You'll often apply a wash straight over a basecoat. However, sometimes you'll apply a Layer before a Shade. Sometimes this will be to darken the tone of the Layer paint; other times, it's just better to start lighter before shading. This also allows you to block in a colour before applying a recess wash. The Layer paint can then be used to tidy up any mess, a technique the army painters and 'Eavy Metal both use regularly.

'EAVY METAL
This unit of Raven Guard Space Marines painted by 'Eavy Metal is a great example of how layering – specifically edge highlighting – brings a model to life.

The basecoat for their black power armour is actually the Chaos Black undercoat and without highlights the models would look really flat and lifeless. If an all-over layer of grey had been applied to the armour, it would simply look grey, even with a heavy wash of Nuln Oil. Instead, the edges of the armour were carefully highlighted with Eshin Grey, Dawnstone and finally pure White Scar on the top edges, giving the impression of a highly reflective, hard surface – perfect for these jet-black power-armoured warriors.

TECHNIQUE: GLAZING

Glazing is a handy technique that can be used to intensify the colours on a miniature, Though similar in appearance to Citadel Shades, Glazes work in a very different way and with a different purpose. Read on to find out how they will enhance your painting.

Glazes are translucent inks that are designed to alter the hue of a colour, making it stronger and more vibrant. They are perfect for drawing attention to parts of a model that you want to capture the viewer's attention – flames, hazard stripes, faces, flamboyant cloaks, and so on.

They are also especially handy when you get towards finishing a model and find that your highlights have de-saturated a colour. This often happens with bright colours such as red and yellow. Depending on your highlight colours, red can take on a pastel hue that borders on yellow or pink, while yellow can end up looking more like cream or bone. A glaze over the whole area will bring back the vibrancy of the original colour (the basecoat or layer) and gently tone down excessive highlighting, resulting in a much smoother transition between the colours, as shown to the right.

Glazes are also great on their own and can even be applied directly over a Corax White undercoat with dramatic effect, as shown on the Hexwraith below.
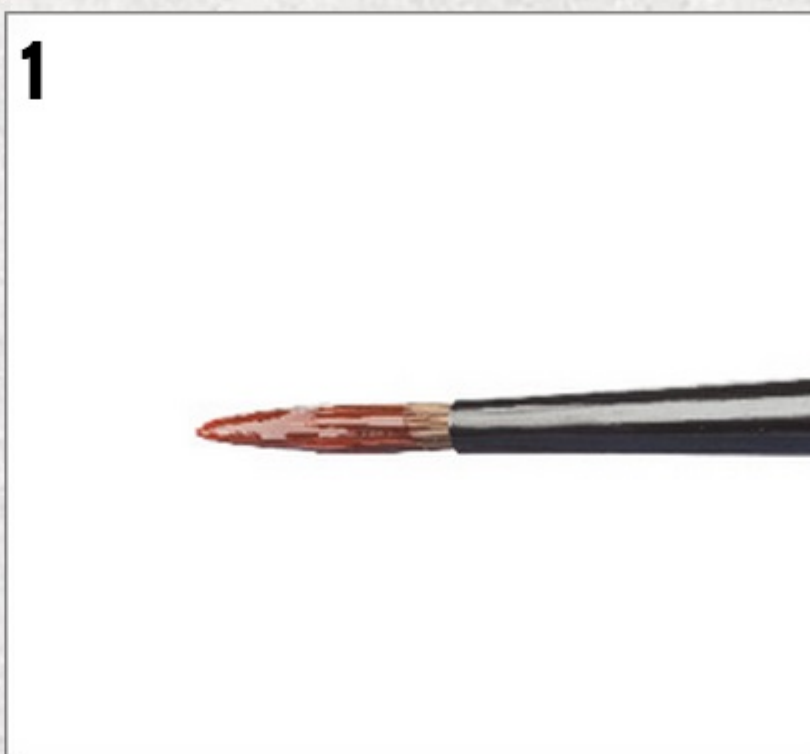
1. When glazing large areas, the M Shade brush is the tool for the job as it can hold a lot of paint in its bristles.

2. A glaze should be applied more like a Layer than a wash: in broad, fluid strokes that cover the whole area without pooling.

3. The Glaze stains the colours beneath it but enables them to show through because of its translucent quality.

4. For lighter or more controlled glazing, use the M Glaze brush. Its long bristles will help you get to those hard-to-reach places on a model.

THE GOLDEN DEMON'S TOP TIPS

Glazes are great on skin! Lamenters Yellow and Waywatcher Green make a model look sickly, like the Plaguebearer on the left, while Bloodletter is perfect for staining a warrior's skin a ruddy, Khorne-tainted red like the Blood Warrior on the right.

STUDIO COLLECTION
This Hexwraith, painted by the army painting team, is a great example of how effective a glaze can be. The whole model was glazed with Waywatcher Green over a Corax White undercoat to give it a luminous, otherworldly feel. The flames on the Hexwraith's body and weapons were layered with Moot Green and Yriel Yellow before they too were glazed with Waywatcher Green to tie them to the rest of the model. It's a quick and simple colour scheme, but devilishly effective.

A Citadel miniature isn't completely finished until its base has been transformed from flat plastic into an evocative battle scape. This maxim is as true for the rank and file infantry in your army as it is the most glorious Golden Demon winning model.

With your model fully painted, all that remains is to complete it with a great-looking base. Citadel Texture are designed with a mixture of coarse and fine grit set into the paint mix so that you can paint them straight onto the bases of your models, and they will dry leaving an awesome textured finish.

At its most simple you can just apply a layer of Citadel Texture paint to your base and when it is dry, you'll have a good result. The best finish, however, comes when you take a little time to add a little extra detail. A Citadel Shade applied over the Texture paint picks out all the nuances of the grit and a drybrush over the top creates a brilliant sense of depth and detail that really completes your model.

With Texture paints, there are two things to bear in mind. The first is that they can damage your brushes (which will also struggle to move the Texture paint around the base). Use an M Texture spreader to apply them. Also, always make sure you give them plenty of time to dry. ☠

1 Use the broad head of your M Texture tool to scoop out a glob of Texture paint. Take a little at a time to help you control it on your base.

2 Spread the Texture paint around the surface of the base with your M Texture tool. Use the narrow head to spread it around carefully.
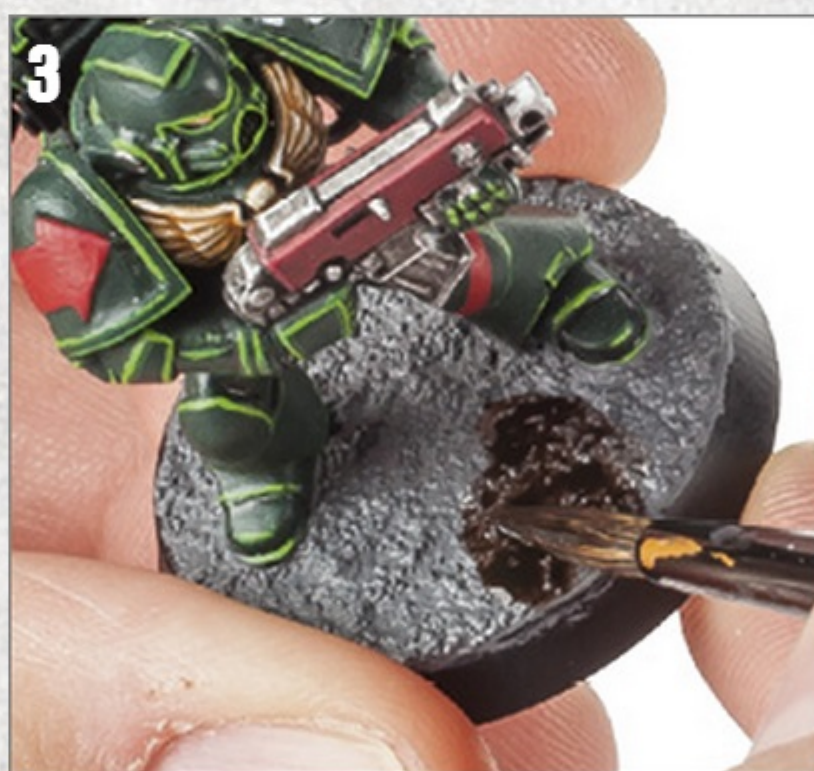
3 Once the Texture paint has fully dried (this takes about 45 minutes) apply a Citadel Shade to emphasise all the textures.

4 Finally, with the Shade dry, give the top of the base a Drybrush to complete the look, and apply a basecoat around the base rim.

THE GOLDEN DEMON'S TOP TIPS

It's all in the details! A textured base looks great, but it looks so much better when there's some extra details. Use slate chips from the Citadel Basing Kits and grass tufts from the Middenheim Turf basing kit.

STUDIO COLLECTION

The Studio army painting team painted a large Tyranid army for the Tyranid Invasion Swarms painting guide. The base on this Hive Guard model is a great example of how you can use the basing techniques shown here to get great results. Before applying the Armageddon Dust Texture paint, they added some resin details and slate chips from the Warhammer 40,000 Basing Kit and even a little Citadel Sand, making it look as though the Tyranid is striding through a war-torn battlefield. Texture paint was then added, washed and drybrushed.

TECHNICAL PAINTS

Blood, pus, rust and sun-parched earth; these are the hallmarks of the Technical Paints, a range of special effects paints that enable you to bring the horrors of war to life on your miniatures, from leaking pus and corroded metal to smatterings of fresh gore.

Technical paints are some of the last paints you'll use on your miniatures, the last finishing touches to your paint job. They are designed to add that extra level of realism to a miniature and, as such, are designed with a specific effect in mind, such as glossy bile or freshly spilt blood, though no doubt you'll find plenty more uses for them over time.

Despite their name, Technical Paints are not hard to use, especially if you follow these tips from the Studio army painting team. Indeed, splattering Blood for the Blood God all over a miniature is strangely satisfying. You can find out more about Technical Paints on our YouTube channel, which features six videos on how to use them to their best effect.

LAHMIAN MEDIUM

Lahmian Medium has two uses, though both are very different. Lahmian Medium is actually paint without a pigment and, as such, it is perfect for reducing the opacity of a coloured paint without affecting its chemical make-up (unlike water, which would dilute it). This is very handy for blending colours on a model or creating your own glazes. Lahmian Medium can also be used as a matt varnish that's ideal for sealing transfers securely to your miniatures. Simply apply it as you would a Glaze with the M Glaze brush.

NIHILAKH OXIDE

Nihilakh Oxide is perfect for creating a corroded copper, bronze or brass effect. It has a thin consistency that is best applied with the M Glaze brush – a little bit on the brush will give you a light effect, while a loaded brush (1) will give you a much deeper, milkier finish like real-life verdigris. Here we painted Nihilakh Oxide into the recesses of a Tomb Guard's khopesh (2), making it look ancient and heavily-corroded.

Top tip: Paint Nihilakh Oxide straight over a Corax White undercoat for ethereal spirits and baleful flames.

TYPHUS CORROSION AND RYZA RUST

These paints work together to create a realistic rust effect on your miniatures. Typhus Corrosion looks like a thick Shade and contains particles of grit that add texture to a model. Apply liberally with the M Shade brush (1) over the area you want to look rusty and let it dry. Then, using the S Drybrush, gently drybrush a layer of Ryza Rust over it (2) to make it look like filthy, peeling rust.

Top tip: Paint Ironbreaker around the edges of the metal to show where the rust has been scraped off.

BLOOD FOR THE BLOOD GOD

Khorne's favourite paint, Blood for The Blood God is specifically designed to look like sticky, glistening, and most importantly, freshly spilled blood. Applying it is easy. Use an S Layer brush to drag the paint across the blades and armour of your models (1). You can even apply some to an S Dry brush and pull your finger across the bristles to 'flick' it onto your models, creating a spatter effect (2). The more you do, the gorier the model

Top tip: Less is more. Start with a little and build it up to create a realistic effect.

MARTIAN IRONEARTH AND AGRELLAN EARTH

These two are cracking paints. No, seriously, they crack as they dry, creating a realistic, sun-parched ground for your models to fight over. Load up the M Base brush with a large glob of this thick paint (1) and apply it to your model's base, being careful of their feet (2). Leave the model somewhere warm, such as a windowsill and leave it overnight to let it crack.

Top tip: Paint a layer of PVA glue onto the model's base first, let it dry, then apply the Martian Ironearth. The cracks will be even bigger!

NURGLE'S ROT

The Plague Father's most fecund blessing in paint form. Nurgle's Rot sets as a glistening residue. We recommend using an M Glaze brush for precision, loaded with a generous glob of Nurgle's Rot (1). Paint it on as you would a Citadel Shade – just be aware it's a little more viscous, so you'll need to poke it around a little with your bristles (2) to get it in the recesses.

Top tip: The thicker you paint it on, the more opaque Nurgle's Rot is, so build it up in layers to get your desired effect.

CITADEL AIR

A popular technique for painting Citadel miniatures is to use an airbrush for basecoats and layers, achieving a smooth, neat basecoat (or layer) in virtually no time. The Citadel Air paint range consists of 51 colours drawn from the Base and Layer range and specially formulated to be fired through an airbrush with no extra preparation. The range also includes a Thinner which, much like Lahmian Medium, enables you to thin the consistency of your paints for subtle blending and shading.
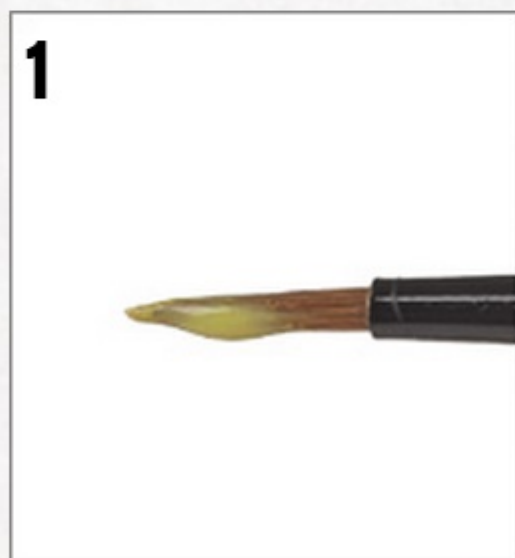
'ARDCOAT

'Ardcoat is a gloss varnish that has multiple uses. When applying transfers, apply a layer of 'Ardcoat to the area first to help smooth over any bumps or ridges created during the painting process – it will make the transfer adhere much more easily. 'Ardcoat also works brilliantly as an effect paint. Applied over power weapons, magic swords and gemstones, it gives them a shiny, magical quality. Lastly, 'Ardcoat can, of course, be used as a gloss varnish to protect your miniatures from the rigours of battle.

WHERE DO I GO NEXT?

Thirsty for more painting advice? Want to sharpen your skills to a razor-keen edge? Games Workshop has compiled a treasure trove of expert painting wisdom, with books loaded with detailed painting guides and a YouTube channel packed with instructional videos.

1-3 The Warhammer Age of Sigmar Painting Guide explains how to paint all the models in the starter set in unstinting detail. As with all our painting guides, the book is also loaded with great background information on the armies it covers.

4-6 Sons of Ultramar is the ultimate guide to painting the Ultramarines Chapter, with sections covering two Ultramarines collections (the 3rd Company of Mikael Fabian and Strike Force Hammerfall). Detailed background and history for these two armies sits alongside comprehensive stage-by-stage tutorials.

With the techniques and tips presented in this issue of White Dwarf, your painting journey has only just begun – there's lots more to learn and enjoy. To help you on your quest, the Citadel Studio has created a wealth of resources, starting with How to Paint Citadel Miniatures. This comprehensive tome is designed to help every painter on their first steps to building and painting armies of Citadel miniatures – it's a great place to start if you're just stretching your painting wings.

The Studio has already created some truly extraordinary painting guides, each looking at some of the most iconic armies in the worlds of Warhammer – guides such as the Tau Empire Armies of Expansion and Tyranid Invasion Swarms, as well as

Sons of Ultramar and the Warhammer Age of Sigmar Painting you see below. Each is full of advice to help you make your own army look fantastic, but that's only the tip of the iceberg. These guides each start with a detailed look at the collections within, steeping you in the history of the army and the heroes within it – this is brilliant, vivid information, chock full of photos, that will have you champing at the bit to build your own force. Each guide then takes you through painting the units in the force so you can build and paint your own collection.
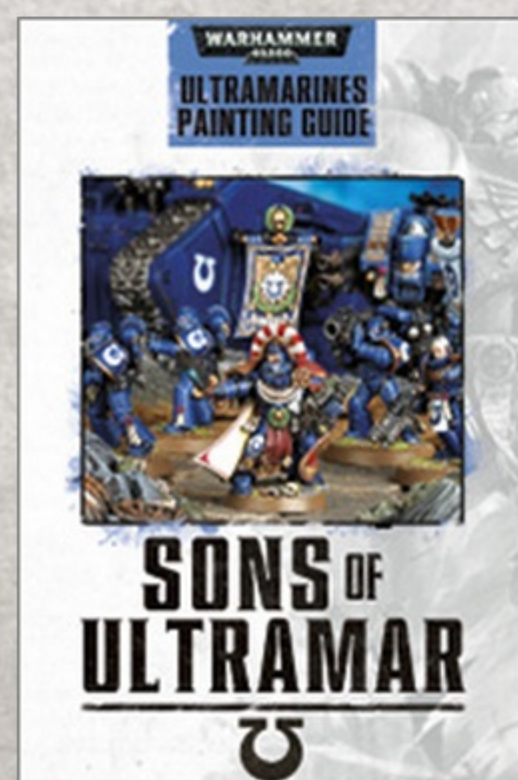
Each of these guides is available as a paperback book, but if you prefer your guides digitally, you can download them for iOS and Android devices, too. 💀

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WARHAMMER TV

There's nothing quite like sitting with a master painter and watching him at work to learn some impressive new techniques, and the talented team who produce the Warhammer TV videos enable you to do just that. Every month they upload brand new tutorials to the Games Workshop website and to the Warhammer TV YouTube channel to show you how to paint all the latest releases and use the Citadel Painting System to get great results on your own models. So, if you want to see exactly what it should look like when you basecoat an Ultramarines Space Marine, or how you get the blood splatter on your Minotaur's battle axe just right, this is the place. Also, it's really good fun painting along with Duncan as you hone your skills. Check out the YouTube channel now: youtube.com/user/GamesWorkshopWNT


The Warhammer 40,000: Dark Vengeance videos are the perfect guide for painters who are just starting out. This series of eight videos tackles all of the models in your Dark Vengeance boxed game, and talks you through the basics of painting. There is no better way to start your painting journey than this.

For painters who have already honed their skills and are looking to develop further, many of the Warhammer TV videos, such as this series covering the Maggoth Lords, break down some of the Citadel Painting System's more advanced techniques – making even the most complex tips and tricks seem straightforward.
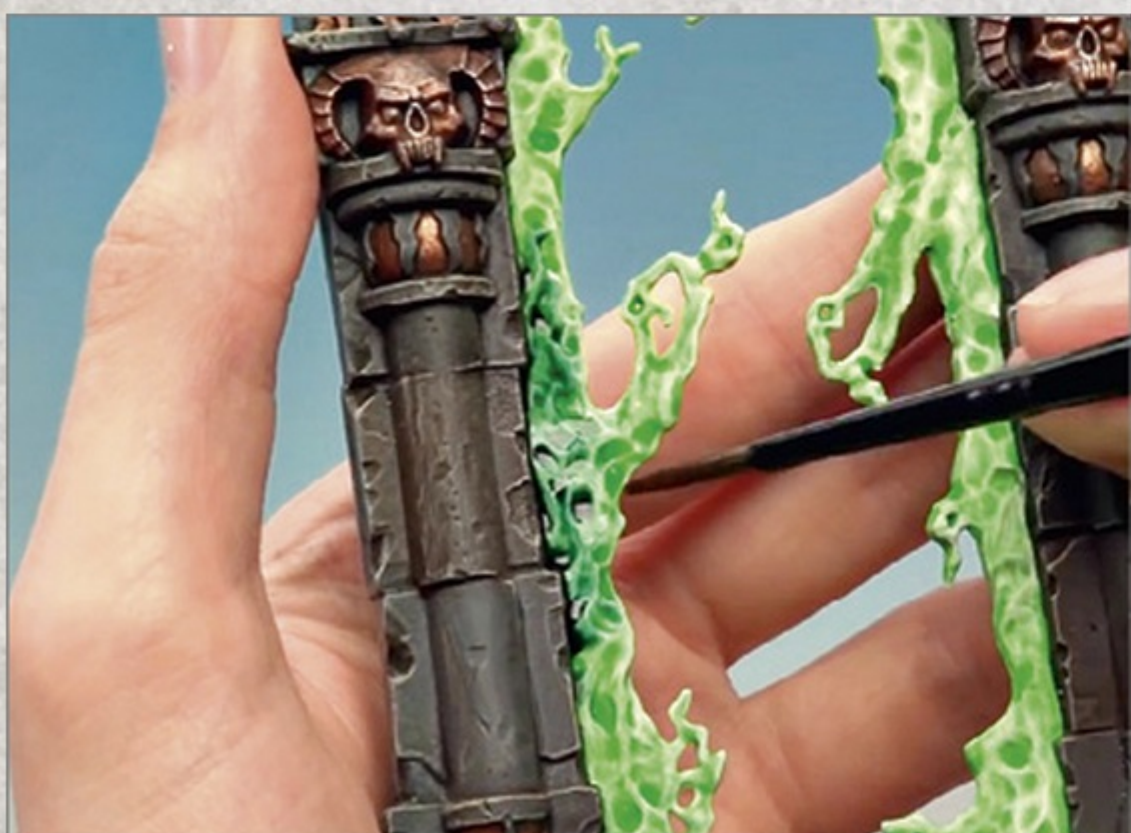
With more than 23,000 views at the time of writing, the Baleful Realmgate painting tutorial has proven wildly popular – it examines a very different part of painting Citadel miniatures, namely taking on a highly detailed scenery piece. The tips on making the magical fog look 'right' are absolutely brilliant.
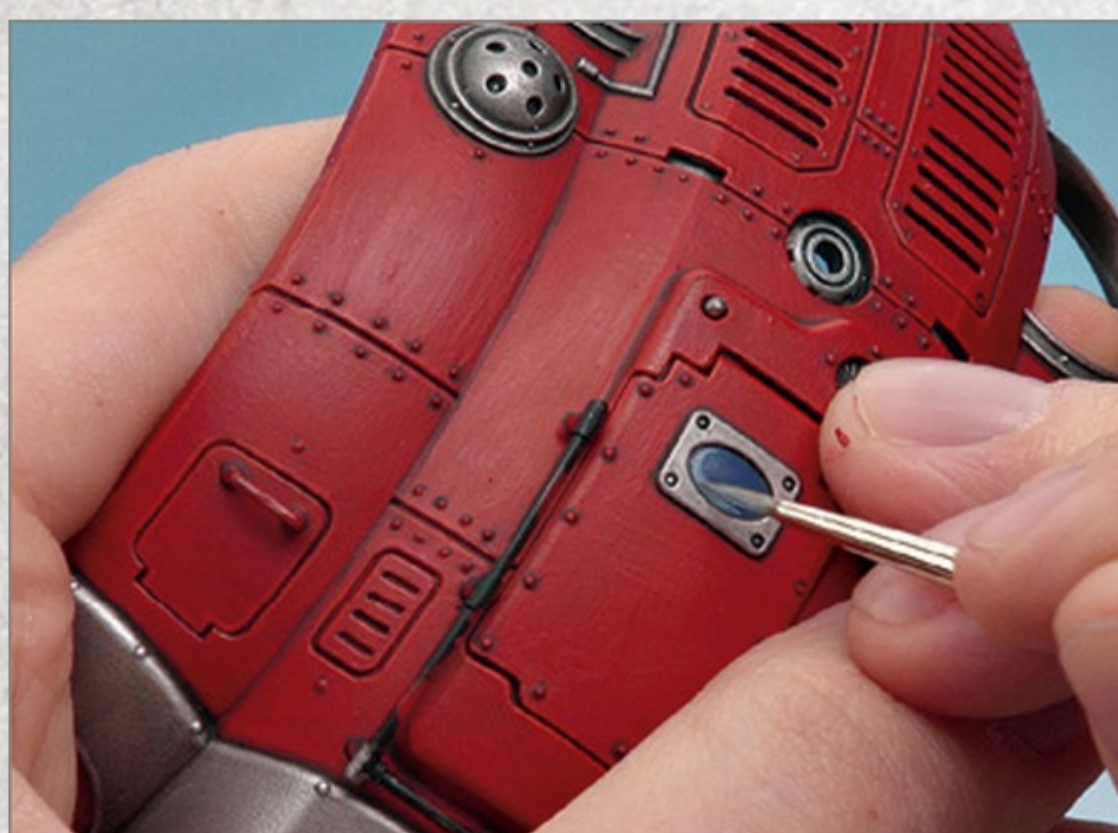
For the most complex models, Warhammer TV will not only covers painting the miniatures, but also assembly and even applying transfers to finish your model. The Imperial Knight series has 50 minutes of content covering every step from building your towering war machine to finishing it off in grand style.

THE QUEST CONTINUES

White Dwarf is, of course, another great source of painting inspiration, with Paint Splatter articles giving you painting guides and professional advice on the latest releases, and Warhammer Visions offering masses of photographic inspiration. Inspiration is, of course, an unparalleled resource for painters as they master their own style, and our 'Eavy Metal articles and Golden Demon galleries showcase the best painted Citadel miniatures in the world.

HAMMERS OF SIGMAR

You've seen how the Citadel Painting System works on individual models, but what about on entire army? Behold the Hammers of Sigmar, a force painted using the techniques shown throughout this issue.

The goal for all painters is to own a beautiful collection of miniatures painted by their own fair hands. The Hammers of Sigmar force shown above was painted by the Studio army painters following the Citadel Painting System and is a great example of the sort of army you can create using the techniques we've shown throughout this issue.

When painting a whole army using the Citadel Painting System, the army painters suggest undercoating, basecoating and shading your models in batches. It's a great way to ensure your painting style is consistent across a whole collection. You could, for example, basecoat a unit while you wait for the wash to dry on another. It's also nice to vary this routine between

painting sessions. One day you could paint armour, the next cloth or skin. By varying what you're painting, you'll keep the excitement for your project running high. A Black Library audio drama playing in the background is a great way to keep your ears occupied while your eyes and hands are at play.

It's also worth planning your colour scheme so that you know it's achievable over a whole force. Painting a Liberator's warhammer with an impressive glowing

effect may look great on one model, but will you be able to replicate it over an entire army? Choose a colour scheme that you know you can paint consistently and well – you can always go back and try out more advanced techniques later on.

Most importantly, have fun! Painting Citadel miniatures is an activity to be enjoyed and the results something to be immensely proud of. We hope our painting advice helps you create many wonderful models for years to come. ☠

MORE HAMMERS OF SIGMAR
Want to know more about painting the Hammers of Sigmar? Pick up a copy of the Warhammer Age of Sigmar painting guide, which features detailed stage-by-stage painting guides for both the Stormcast Eternals and the Khorne Bloodbound in the Warhammer Age of Sigmar starter set.

'EAVY METAL

The 'Eavy Metal team produce some of the best-painted miniatures in the world, their work featured in the pages of White Dwarf every week. Their work is seen as the pinnacle of miniatures painting and has inspired countless generations of painters around the world.

1 The hammer-shaped constellation on Vandus's cape was carefully painted by hand, a great example of pushing your painting skills to the highest level.

2 Calanax's eyes and mouth were painted using subtle layers and glazes to make them look like they're glowing.

3 The layers on this model's armour are blended together to emphasise its solidity, the sharp edge highlights showing where the light catches it.

This rendition of Vandus Hammerhand was painted by the 'Eavy Metal team for the release of Warhammer Age of Sigmar. For many, this level of painting is purely inspirational, requiring a level of skill and dedication that one can only dream of.

Yet despite its intricacies, Vandus was still painted using the core techniques shown throughout this issue, albeit taken to the extremes of painting skill. The gold armour, for example, is basecoated with Retributor Armour and shaded to give it ruddiness and depth, while Calanax's skin has been layered multiple times and glazed to give it a leathery appearance. Admittedly there's more to it than that – the shades on the gold, for example, were meticulously applied to emphasise the reflectiveness of the armour – but the core tenets are the same. To reach this level of painting requires not only a good understanding of the core techniques, but also the desire to master them, adapt them and develop your skills. For some, it's a lifetime goal to paint this well. Most of us are just happy to gaze in admiration at these exceptionally-painted models, perhaps a little jealously, and appreciate them for the works of art they are. 💀

The Horus Heresy
BETRAYAL AT CALTH

EXCLUSIVE WHITE DWARF SCENARIO: AT ANY COST

As the warriors of the XIII and XVII Legions battle furiously through the darkened underworld of Calth, the battle lines begin to fracture. With vox communications faltering and confusion all around, the Ultramarines struggle to hold back the traitor tide. As Word Bearers forces break through, one small band of Ultramarines finds itself surrounded and cut off, fighting to keep an honoured relic of their Legion from heretic hands.

The Vault-Vexillium rang to the sound of gunfire. To Sergeant Caudeus it sounded like the end of all things, a hammering concussion that heralded the Imperium's demise. The white-haired legionary shook off his dismay, disgusted with himself at such a moment of maudlin weakness. Nothing was over while even a single member of his Ultramarines Legion still drew breath.

"Lorgar's dogs have us surrounded."

Caudeus ducked as another hail of bolter fire chewed along the top of his barricade. Chips of marble and plasteel rattled from his armour. The Ultramarines sergeant thumped off three precise shots with his own weapon. Two Word Bearers were blown off their feet in an untidy sprawl of limbs and spraying blood. A third ducked hurriedly back into the shelter of a granite column. They were drops in an ocean; more arrived with every moment. The strobing ring of fire from their weapons hemmed the Ultramarines in on all sides. "Tynon," voxed Caudeus, "we cannot stay here. They will best us. They will seize the standard."

The sergeant shot a glance behind him, to where Brother Olmenus cradled the stasis-pod in which was folded the precious honour-standard of Guilliman's First Oath.

"Agreed," replied Tynon. "They may take our lives, but they will not take our honour."

"Theoretical – we could fight our way to the southern service chute?" suggested Caudeus.

"It takes only one of us to carry it," agreed the hulking Cataphractii. "We shall sell our lives dearly so that your man may make his escape."

The two sergeants nodded griming the orders that would see the banner borne to safety, no matter the cost.

Forces

This mission uses miniatures, board sections and components from two copies of The Horus Heresy: Betrayal at Calth. Each force starts with the miniatures below, but will be bolstered with reinforcements as the mission progresses.

The Ultramarines force initially consists of two Legion Veteran Tactical Squads and one Legion Terminator Squad. The Word Bearers force initially consists of Kurtha Sedd, two Legion Veteran Squads and Sor Gharax, the Bull.

Set-up and Initiative

First, the Ultramarines player sets up his Legion Terminator Squad and one of his Legion Veteran Squads in the Ultramarines Deployment Zone. He then sets up his other Legion Veteran Squad in the Relief Force Deployment Zone. The Ultramarines player then sets up four barricades as they like; each must be either in the Ultramarines Deployment Zone or a hex that is adjacent to it.

Then the Word Bearers player sets up his force, split however he wishes between the three Word Bearers Deployment Zones.

The Ultramarines player takes the initiative in the first round.

Command Cards

The Ultramarines player puts the Not One Step Back Command Card back in the box, then takes two others into his hand at random. He then creates a Command Deck of six cards.

The Word Bearers player takes one Command Card into his hand, then creates a Command Deck of six cards.

Special Rules

Defend the Standard: After the forces have been set up, the Ultramarines player puts the Standard marker anywhere in the Ultramarines Deployment Zone. If an Ultramarines unit moves out of a hex that contains the standard marker, it can take the marker with it as it moves. If the standard marker enters the Access Tunnel hex it is secured and removed from the board.

Obstructions: Obstructions block movement and Line of Sight in the same way as sealed Blast Doors. A model with the Relentless Advance special rule can move through an Obstruction, in which case it is removed. If a unit can draw Line of Sight to an Obstruction, it can target it with a Shoot action. If four Hits are caused, the Obstruction is removed.

Bar the Way: If an Ultramarines unit ends an action adjacent to an open blast door, the Ultramarines player can roll a dice for each model in the unit. If they score a critical hit, the door is sealed. Sealed blast doors cannot be opened in any way. After Blast Door A has been sealed, remove any models that are still behind it.

Superior Numbers: At the start of each round after the first, the Word Bearers player rolls three dice. For each hit they roll, they can set up a depleted Legion Veteran Squad of up to five models at one of the side passages. For each critical hit they roll, they can either set up two depleted Legion Veteran Squads at two different side passages, or set up a Contemptor Dreadnought (using the rules for Sor Gharax) at one of the side passages.

Emergency Teleport: At the start of the game, the Ultramarines player sets aside Captain Aethon and the second Legion Terminator Squad. At the end of the ready phase in turns 2 and 3, he chooses three of the models that were set aside to teleport in. Put each teleporting model in an empty hex anywhere on the board and roll a dice. On a blank, the model is removed as a casualty. Otherwise, it receives two tactical points if a critical hit was rolled, one if a hit was rolled and none if a shield was rolled. You can re-roll the dice when Captain Aethon teleports in.

Victory

The Word Bearers player must eradicate the Ultramarines as quickly as possible. The game ends if there are ever no Ultramarines models on the board, or when the Word Bearers player draws his last Command Card.

The Ultramarines player then scores Objective Points as follows:

One point if the standard was secured.

One point if all three blast doors were sealed.

One point for each Contemptor Dreadnought that was destroyed.

The Word Bearers player scores one Objective Point for each card still in his deck at the end of the game. If the Ultramarines player scores more points, he claims a Victory; otherwise, the Word Bearers player claims a victory.

COMPONENTS
- Boards
A2, A2,B1, B2, C1,
C2, D1
- Barricades x 4
- Obstructions x 4

Relief Force
Deployment Zone

Word Bearers
Deployment Zone

A1

D1

Open Blast Door

Obstruction

Open Blast
Door

Side
Passage B

Side
Passage A

C2

B1

Word Bearers
Deployment
Zone

B2

Word Bearers
Deployment Zone

C1

A2

Access
Tunnel

Side Passage C

Open Blast Door

Ultramarines
Deployment Zone

Obstruction

Obstruction

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