



altro

Designed for possibilities.  
Made for people.



**Operating rooms: floors and walls guide**

**altro.com**

# Your guide to floor and wall finishes that enhance operating room hygiene and durability.

## Contents

Today's modern operating room	3
The increasing size of ORs	3
Hybrid operating rooms	4
Integrated floor and wall system	6
In-house digital cutting	7
Industry guidelines	8
Floor plan	10
Mood board	12
Altro Whiterock wall system	14
Altro Whiterock Digiclad	16
Altro Tierra	18
Altro Suprema flooring	20
Altro Reliance 25 flooring	22
Altro Operetta flooring	24
Staining	26
Cleaning and disinfecting	27
Sterile area cleaning guide	27
Floor and wall maintenance overview	27

### Today's modern operating room

The recent trends in healthcare have changed the needs, and footprint, of today's operating rooms (ORs). But as the industry standard continues to evolve, aseptic technique and the sterile field, patient safety, regulatory compliance and less use of anti-microbial additives all remain top priorities in the surgical centre.

Aseptic technique

Regulatory compliance

Fewer anti-microbial additives

More procedures with less downtime

Larger, multi-purpose rooms

More complicated and heavy equipment

### The increasing size of ORs

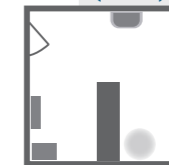
The footprint of the OR is largely dependent on the size of the hospital. Large hospitals may have many smaller and specialised ORs, provided they have the demand to support the investment. Smaller hospitals may prefer to design a large, multi-purpose OR or Hybrid OR that can perform a variety of procedures from orthopedic surgery to vascular surgery.

With the growing need for more frequent, complicated and diverse procedures, the size and complexity of ORs are increasing.

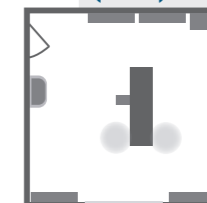
In the 1970s changes in federal regulations increased the minimum size of a general purpose OR from 30m<sup>2</sup> to 37m<sup>2</sup>. But, this seems tiny by today's standards.

According to the Health Care Advisory Board's Facility Innovation Brief, most architects and facility planners generally agree that 56 to 60 square metres is ideal for a standard operating room, considering surgical staff circulation space and the amount of mobile equipment required. However, some modern Hybrid ORs are as large as 120 square metres.

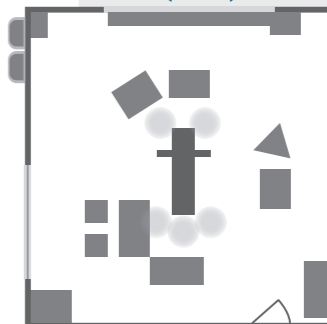
1960s (28m<sup>2</sup>)



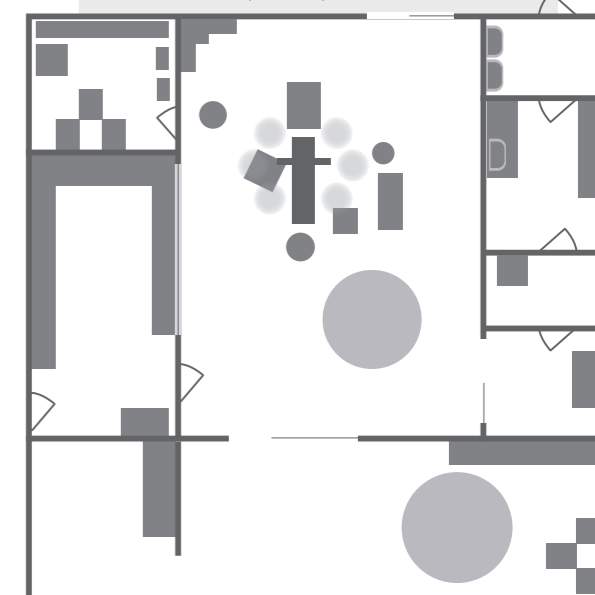
1970s (37m<sup>2</sup>)



Modern OR (56m<sup>2</sup>)



Modern Hybrid OR (120m<sup>2</sup>)





## Hybrid Operating Rooms

Many major hospitals have moved to more efficient and centralised Hybrid operating rooms. Hybrid ORs promote efficiency, decrease the risks to patients, and provide a cost effective solution by allowing multiple procedures to be completed in a single suite.

By centralising everything, this allows hospital staff to do imaging and procedures in one area without the need to move a patient. These suites allow doctors across different specialities to access all necessary technology and imaging equipment in one central location. This lowers the risk of infection to the patient, increases the efficiency of the surgical team and reduces costs.

Hybrid ORs are typically 93-120 square metres, which are much larger than traditional ORs. Hybrids are filled with heavier and more complex equipment weighing in excess of 4 tonnes. They receive more foot and wheeled traffic, and have less downtime in between surgeries.

### More procedures, greater demands

The continual advancement in equipment and imaging capabilities of a hybrid operating room allows for more operations to be done arthroscopically, which reduces procedure and recovery time.

This increases the number of surgeries that are completed in a day meaning greater circulation, higher turnover, more cleaning, and significantly more stress on finishes.

It is imperative that these environments have regimented cleaning procedures to ensure these ORs are properly cleaned and disinfected in between operations. At the same time, it is equally important that the floor and wall finishes installed can withstand the level of cleaning required.

Durable floor and wall products

Flooring able to withstand heavy loads

Slip-resistant flooring

Easily cleaned and disinfected



Stainless steel corner guards for increased protection

Altro Whiterock used as wall protection (can also be used at full height)

Wall overlaps floor for enhanced hygiene and cleanability

Altro Tierra static-conductive flooring for equipment and staff protection

Thermoforming of corners for enhanced hygiene and cleanability

### Did you know?

With the chance to generate over £80,000 worth of revenue per day in a single operating room, facilities want the best, most robust floor and wall solution to meet their needs on a daily basis.

## An integrated floor and wall system

It's an integrated system, which means it fits together perfectly to provide a hygienic, watertight surface — ideal for designing a sterile field. This doesn't just offer the best possible protection against bacteria and contamination; it makes cleaning easy too.

Easy to clean

Effective detailing + accessories

Fully sealed

Thermoformed on site

Heat welded joints

High impact resistance

### Easy to keep clean

Together, our products provide a robust, hard-wearing surface that resists stains, odours and chemicals. PVC is non-porous, non-shedding, and has very high impact resistance, preventing damage that can trap bacteria compared with traditional surfaces.

### Fully sealed

Altro Whiterock is a fully-bonded system with hygienic sealed edges, abutments and joints. It can even be sealed around fixtures and fittings.

When joined together with Altro flooring, they form a watertight covering - from floor to ceiling.

### Thermoforming

Because our wall panels can be moulded around corners on-site, they form an uninterrupted surface that's resistant to impact and damage. There's no need for unsightly corner trims which can form potential dirt traps that are difficult to access and clean.

### Joint forces

Joints and junctions are a key part of system integrity.

While we have multiple joining methods, in hygienic areas Altro recommend heat welding for all wall joints and overlapping at the wall to floor transition.

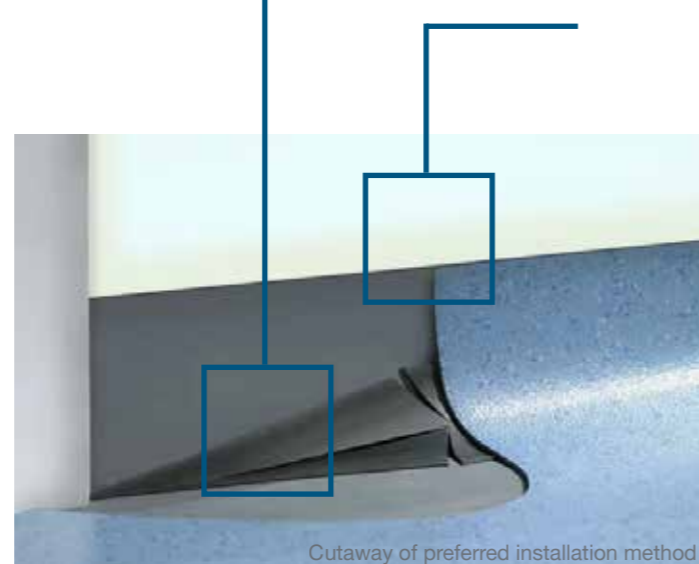


Thermoformed corners  
No unsightly trims

Heat welded joints  
Fully sealed, seamless joining

Cove former  
For a seamless transition

Wall overlaps floor  
Preferred installation



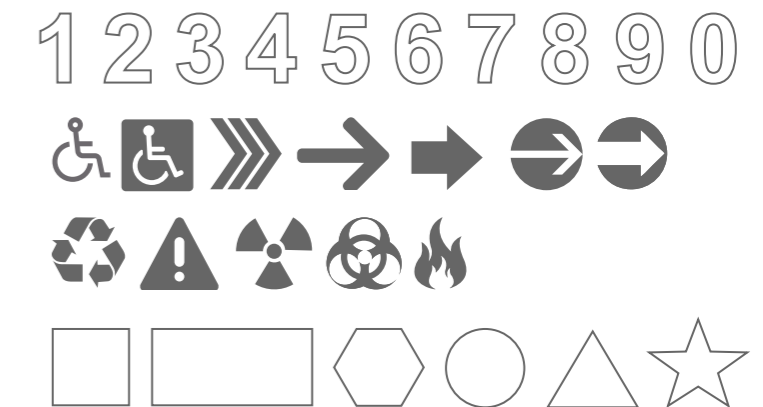
## In house digital cutting services

Renovating multiple ORs at the same time? Altro's in-house cutting machine is capable of making very precise cuts to your exact specification. By cutting the material in advance by machine, installation and OR downtime are reduced. This also ensures the cuts are made precisely to your specification.

### Typical digital cutting requests

- ✓ Shape under OR tables
- ✓ Wayfinding
- ✓ Icons
- ✓ AIGA Symbols
- ✓ Numbers
- ✓ Logos
- ✓ Borders
- ✓ Medallions
- ✓ Room-kits
- ✓ Corridor-kits
- ✓ Paediatric theming
- ✓ Patterning

In addition, we can cut custom shapes, words, symbols or numbers.





## Meeting the mark - How do Altro products stand up to guidelines?

Engineering our products to perform well in the most demanding of situations means your installation is durable, long-lasting and meets industry standards.

### American Institute of Architects (AIA)

- ✓ Floor/wall should be free of fissures, open joints, crevices that may retain or permit the passage of dirt and particles
- ✓ Seamless floor / wall finishes should be used to ensure cleanliness and minimise risk of healthcare acquired infections (HAIs)

### 2018 FGI Guidelines (Facility Guidelines Institute)

- ✓ Flooring shall be cleanable and wear-resistant
- ✓ Slip-resistance level of floor shall be appropriate for the area of use
- ✓ High gloss / reflective surfaces shall be avoided
- ✓ Operating rooms shall have floor and wall base assemblies that are monolithic and have integral coved wall base up the wall a minimum of 152mm
- ✓ Flooring shall be unaffected by wet cleaning, germicidal, and other types of cleaning solutions
- ✓ Walls shall be washable
- ✓ Walls shall be free of fissures, open joints or crevices
- ✓ Walls shall be monolithic or have sealed seams that are tight and smooth
- ✓ Painted walls should not be used in ORs

### Additional considerations

- ✓ Indentation resistance – minimum 1,000 psi
- ✓ Bacteria-resistant surfaces – without the addition of anti-microbials
- ✓ Stain resistance to chemicals used in procedures, sterilisation, and cleaning
- ✓ Impact-resistant walls



### CSA Z8000\* (Canadian Standards Association)

- ✓ Surface material shall be resistant to microbial spread and growth
- ✓ Minimum height of OR: 3.5 metres / 11.5 feet
- ✓ Floors shall be cleanable and maintainable without toxic stripping and finishing  
\*specific regulation related to the design of healthcare facilities

### US Pharmacopeia - USP 797/800

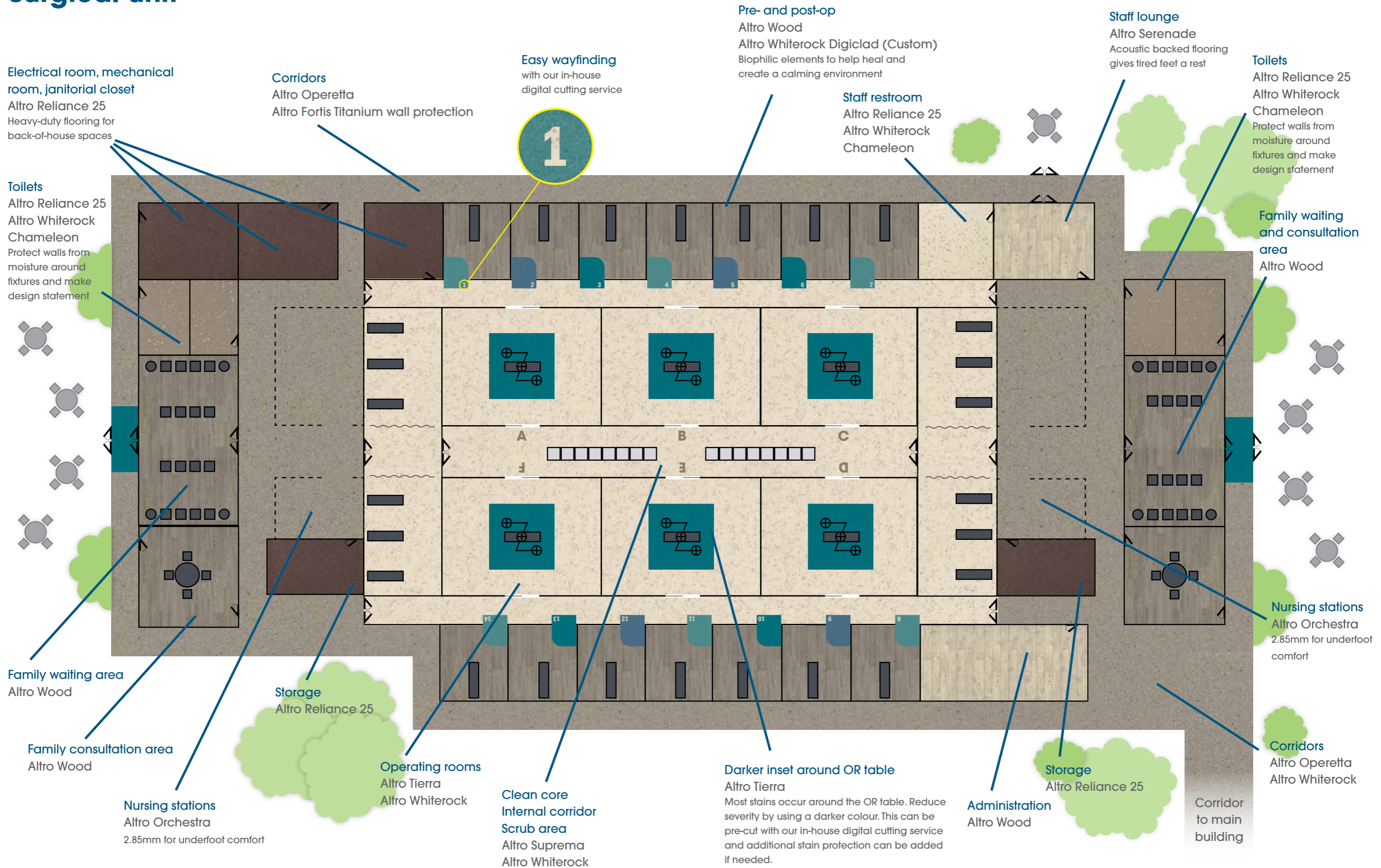
The US Pharmacopeia - USP 797/800 also have many regulations which apply to ORs. While many of these overlap with the FGI guidelines, there are additional guidelines that must be addressed. USP guidelines are legally enforced on a state and federal level and failure to comply can lead to costly shutdowns.

- ✓ Flooring cap should be avoided – smooth floor to wall transitions such as overlap or heat-weld methods are preferred
- ✓ Preferably floors are overlaid with wide sheet vinyl flooring with heat-welded seams
- ✓ Particle emission must meet ISO Class 5 and lower





# Surgical unit



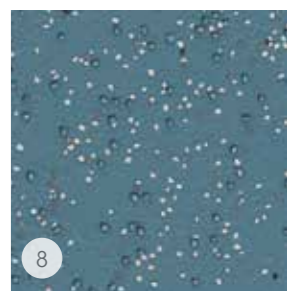
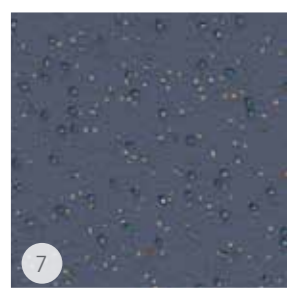
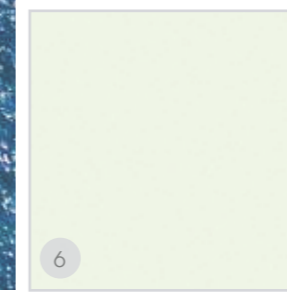
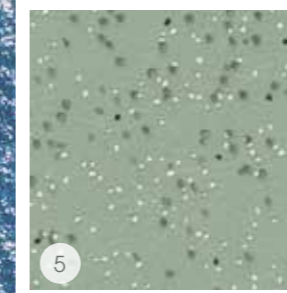
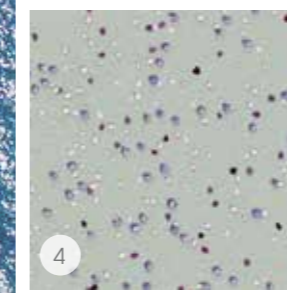
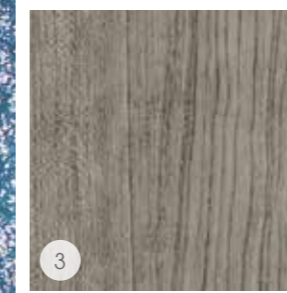
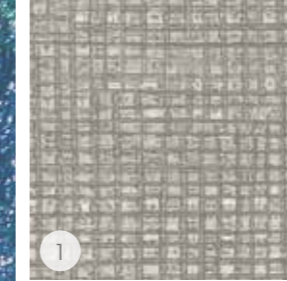
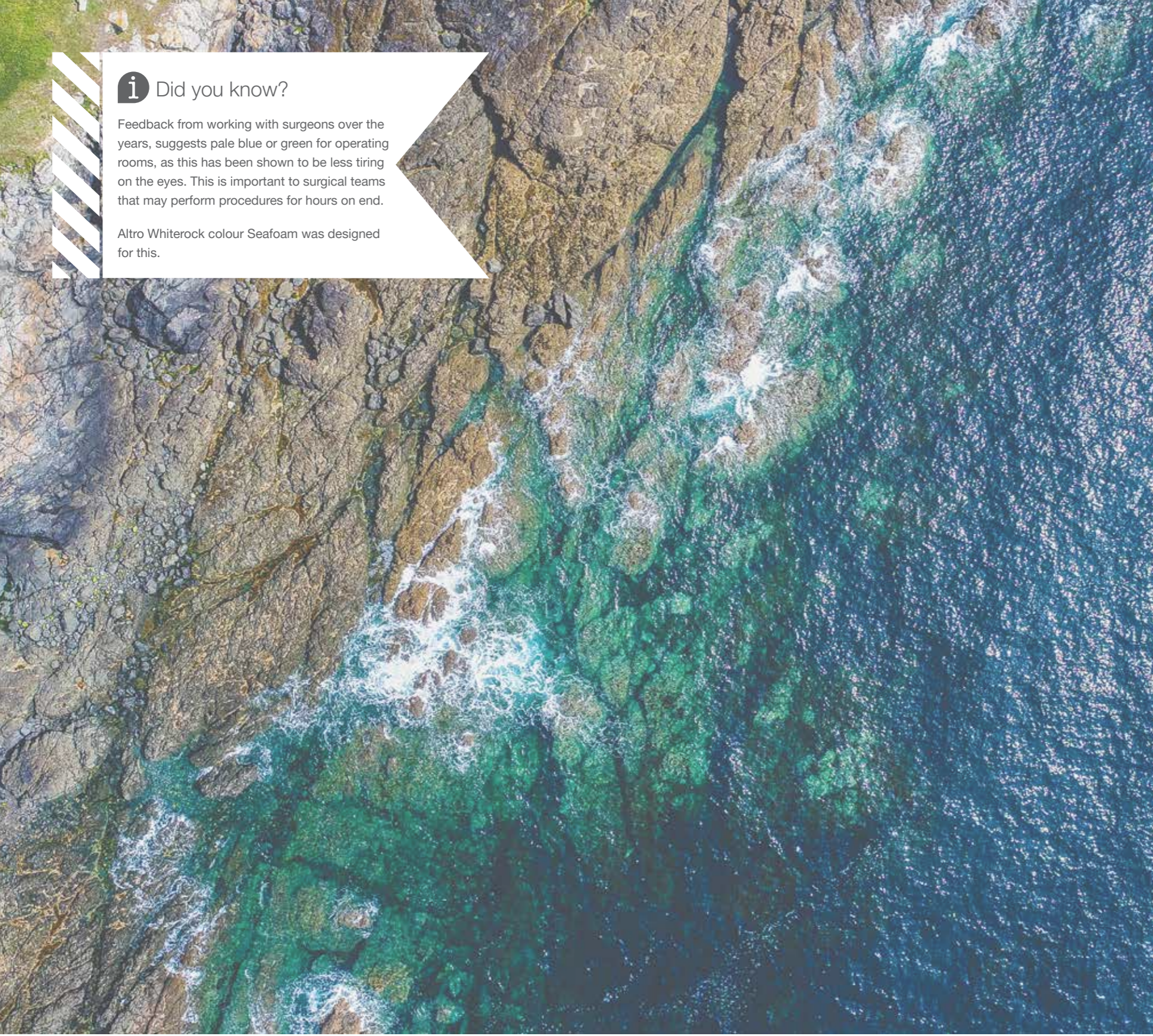
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**i** Did you know?

Feedback from working with surgeons over the years, suggests pale blue or green for operating rooms, as this has been shown to be less tiring on the eyes. This is important to surgical teams that may perform procedures for hours on end.

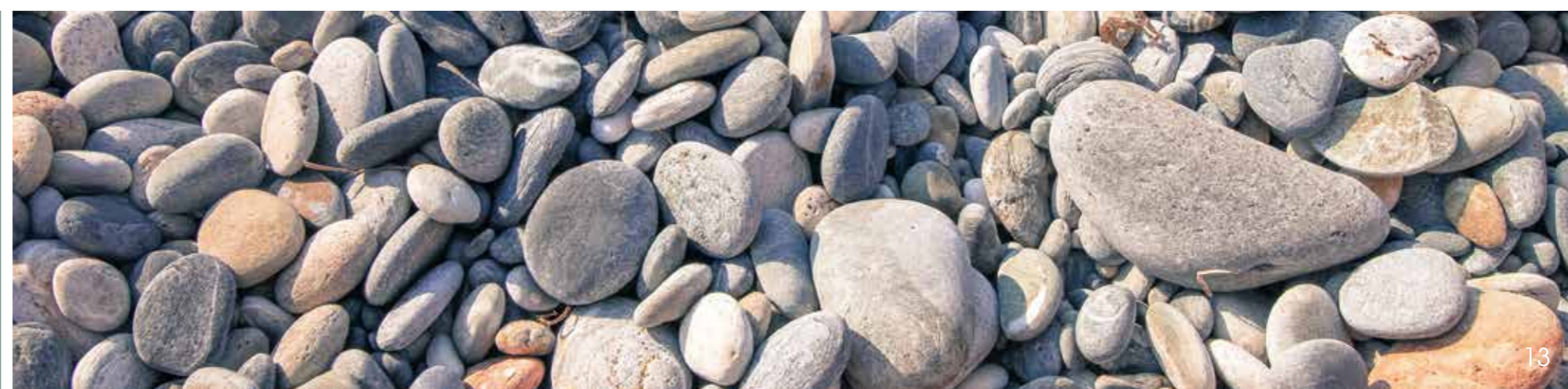
Altro Whiterock colour Seafoam was designed for this.



9

- 1. Altro Operetta Clef
- 2. Altro Operetta Madrigal
- 3. Altro Operetta Pale Cherry
- 4. Altro Suprema Acer
- 5. Altro Suprema Kolibri

- 6. Altro Whiterock Satins Seafoam
- 7. Altro Suprema Salvia
- 8. Altro Suprema Lotus
- 9. Altro Whiterock Promenade





# Altro Whiterock™

## Complete PVCu hygienic wall sheet system

Altro Whiterock provides the ideal walling solution for modern ORs. Our heat thermoformable panels may be installed seamlessly to prevent cracks, gaps and fissures or with system accessories engineered to maintain the integrity of the encapsulated system.

These joining methods create a smooth, seamless surface that prevents the harbouring of bacteria.

Altro Whiterock's smooth, durable, hygienic, and easy-to-clean surface can help you meet demanding regulatory requirements, and minimise OR downtime between surgeries — with no surprises along the way.

- ✓ 2.5mm thick
- ✓ 1.22m x 2.5m and 1.22m x 3.0m panels
- ✓ up to 30-year guarantee
- ✓ 27 in satins, 1 white and 16 Chameleon
- ✓ Stain-resistant
- ✓ Impact-resistant
- ✓ Low-VOC emitting



### Altro Whiterock White



### Altro Whiterock Chameleon



### Technical information

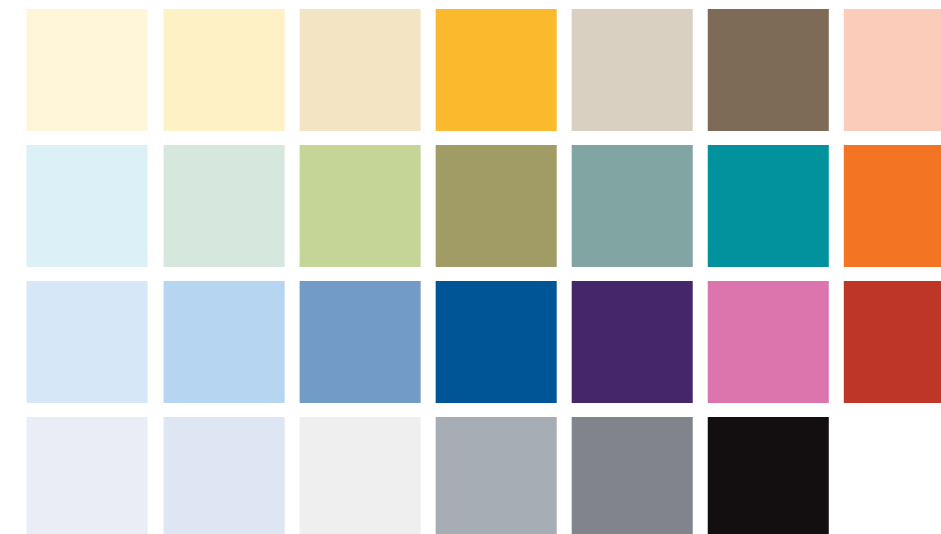
#### Altro Whiterock White and Altro Whiterock Satins

Surface finish	Satin	
Thickness	2.5 mm	
Size	2500 mm x 1220 mm 3000 mm x 1220 mm	
Weight	3600 g/m <sup>2</sup>	
Maximum service temperature	60°C	
E-modulus of elasticity	ISO 527	2950 MPa
Notched Impact resistance	ISO 179/1ea	9.5 KJ/m <sup>2</sup>
Flexural strength	ISO 178	70 MPa
Tensile strength	ISO 527	52 MPa
Shore D hardness	ISO 868	76
Thermal conductivity- 'K Value'	EN 12524	0.17 W/mK
Water absorption	ISO 62	≤ 0.1%
Moisture vapour transmission rate (MVTR)	ASTM E96	≤ 0.12 g/m <sup>2</sup> /24hrs
Fire performance	EN 13501-1 BS 476 pt 6 BS 476 pt 7	B- s3, d0 Class 0 Class 1

#### Altro Whiterock Chameleon

Surface finish	Gloss	
Thickness	2.5 mm	
Size	2500 mm x 1220 mm 3000 mm x 1220 mm	
Weight	3500 g/m <sup>2</sup>	
Maximum service temperature	60°C	
E-modulus of elasticity	ISO 527	3700 MPa
Notched Impact resistance	ISO 179/1ea	2.9 KJ/m <sup>2</sup>
Flexural strength	ISO 178	94 MPa
Tensile strength	ISO 527	59 MPa
Shore D hardness	ISO 868	80
Thermal conductivity- 'K Value'	EN 12524	0.17 W/mK
Water absorption	ISO 62	≤ 0.1%
Moisture vapour transmission rate (MVTR)	ASTM E96	≤ 0.12 g/m <sup>2</sup> /24hrs
Fire performance	EN 13501-1 BS 476 pt 6 BS 476 pt 7	B- s3, d0 Class 0 Class 1

### Altro Whiterock Satins



### Meets the following requirements

- ✓ Smooth
- ✓ Impervious
- ✓ Free from cracks
- ✓ Non-shedding
- ✓ Resistant to disinfectants
- ✓ Able to seal at ceiling
- ✓ Able to heat weld
- ✓ Combines with Altro flooring
- ✓ Meets AIA guidelines
- ✓ Meets FGI guidelines
- ✓ Meets CSA Z8000 guidelines
- ✓ HACCP approved

### Features and benefits

- ✓ B-s3, d0 fire rated
- ✓ Consistent 2.5mm thickness
- ✓ Heat welded seams
- ✓ Fully bonded to substrate
- ✓ Impervious to water ingress
- ✓ Extremely impact-resistant
- ✓ Highly stain and chemical resistant
- ✓ Withstands robust cleaning procedures including pressure washing
- ✓ Non-porous, hydrophobic
- ✓ Non-shedding
- ✓ No VOCs
- ✓ Lead-free
- ✓ Internal and external preformed corner accessories available
- ✓ Thermoformable on site



## Altro Whiterock Digiclad™ (Custom)

A growing trend with paediatrics as well as other areas is to add more natural images into the surgical areas. This concept, called biophilic design, is proven to reduce stress, improve our well-being, and expedite healing.

With Altro Whiterock Digiclad (Custom), you can produce high quality, life-like images that include all the hygienic and functional attributes of Altro Whiterock. With vector artwork, these images can span multiple panels or could be used singularly as a design element. The choice is yours and the design opportunities are endless.

- ✓ Fully hygienic, sealed system
- ✓ Use with Altro Whiterock
- ✓ Inspirational images
- ✓ Infinite possibilities



Learn more about the completely custom Altro Whiterock Digiclad (Custom) process in the brochure or ask your local sales rep.





# Altro Tierra™

## Static-conductive flooring

In healthcare, the high-tech industry and clean rooms, equipment failure is not an option. Altro Tierra is a static-conductive, flexible vinyl flooring system with permanent anti-static properties\*. It gives the highest level of protection against Electro Static Discharge (ESD), when conductive footwear is worn.

Non-absorbent and non-porous, Altro Tierra's homogeneous surface means it also performs well in the highly trafficked environments that use heavy and wheeled equipment.

The spark created by an ESD can be enough to ignite flammable materials, such as the chemicals often used and stored in the healthcare sector.

When the appropriate footwear is worn, Altro Tierra removes the risk of this happening, giving peace of mind that staff and patients are safer.

\* $\leq 20V$  according to IEC61340-4-5 and  $\leq 2kV$  according to EN1815.

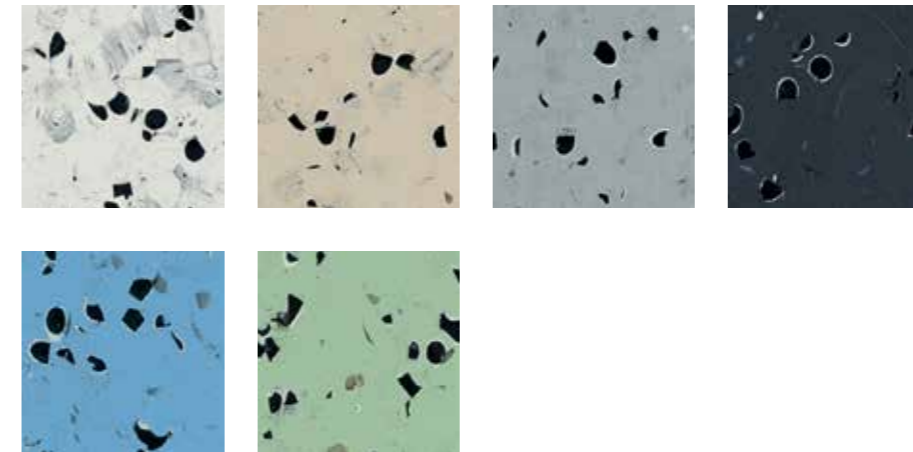
- ✓ 2mm thick
- ✓ 2m wide
- ✓ 5-year guarantee
- ✓ 6 colours
- ✓ Stain-resistant
- ✓ Low-VOC emitting
- ✓ Non-toxic, non-polluting, no heavy metals



floors

### Technical information

	Fire behaviour tested in acc. with	EN ISO 9239-1 EN ISO 11925-2	$\geq 8kW/m^2$ Pass
	Classified in acc. with	EN 13501-1	B <sub>s</sub> -s1
	Slip resistance	EN 13893 EN 16165 Annex B	DS R9
	Sound insulation	EN ISO 140-8	ca. 7 dB
	Flooring type	EN 10581	Smooth flooring
	Thickness	EN ISO 24346	2 mm
	Wear layer	EN ISO 24340	2 mm
	Roll dimensions	EN ISO 24341	2 m x 20 m = 40 m <sup>2</sup>
	Weight	EN ISO 23997	3.06 kg/m <sup>2</sup>
	Indentation	EN ISO 24343-1	$\leq 0.10$ mm
	Classification for use	EN ISO 10874	34, 43
	Flexibility	EN ISO 24344	Pass
	Dimensional Stability	EN ISO 23999	$\leq 0.4$ %
	Light fastness	EN ISO 105-BO2	$\geq 6$
	Castor chair abrasion	EN 425	Pass
	Wear resistance	EN 660-2	Group P
	Chemical resistance	EN 26987	Good
	Under floor heating	EN 12524 (thermal conductivity)	Suitable 0.25W/(m/K)
	Electrical behaviours	EN 1081 IEC 61340-4-1 ANSI / ESD-S7.1	$10^4 \leq R \leq 10^6$ Ohms $R \leq 10^8$ Ohms $2.5 \times 10^4 \leq R \leq 10^6$ Ohms
	Static electric propensity	EN1815 IEC 61340-4-5	$\leq 2$ kV Antistatic $\leq 20$ V



### Meets the following requirements

- ✓ Smooth
- ✓ Impervious
- ✓ Free from cracks
- ✓ Non-absorbent
- ✓ Non-porous
- ✓ Resistant to disinfectants
- ✓ Able to cove
- ✓ Able to heatweld
- ✓ Combines with Altro Whiterock wall system
- ✓ Meets AIA guidelines
- ✓ Meets FGI guidelines
- ✓ Meets CSA Z8000 guidelines



# Altro Suprema™

Patent No. GB 2 462 167

## Slip-resistant flooring

Altro Suprema is the top choice in OR flooring solutions, boasting an expansive colour palette and superior stain, abrasion and scratch resistance.

The product is impervious, free from cracks and crevices, and non-shedding. Built with Altro Easyclean surface technology, Altro Suprema is resistant to disinfectants and other cleaning agents.




















Combine with Altro Whiterock wall panels for areas requiring a seamless, floor-to-ceiling, hygienic surface.

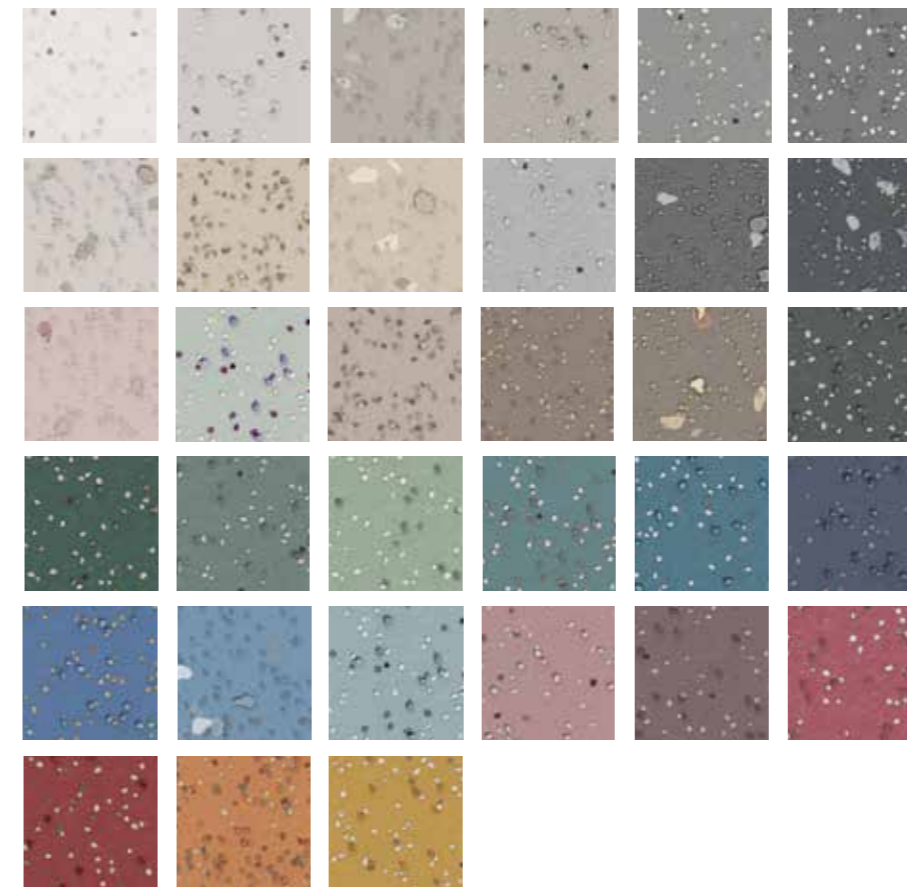
- ✓ 2mm thick
- ✓ 2m wide
- ✓ Withstands 2000 psi
- ✓ 10-year guarantee
- ✓ 33 colours
- ✓ Stain-resistant
- ✓ Low-VOC emitting
- ✓ Non-toxic, non-polluting, no heavy metals



floors

### Technical information

	Fire behaviour tested in acc. with	EN ISO 9239-1 EN ISO 11925-2	≥ 8kW/m <sup>2</sup> Pass
	Classified in acc. with	EN 13501-1	B <sub>s</sub> -s1
	Slip resistance	EN 13893 PTV EN 16165 Annex B ASR EN 13845 Annex C	≥ 0.30 / DS ≥ 36 R10 A1.5 ESf
	Sound insulation	EN ISO 140-8	ca. 5 dB
	Flooring type	EN 13845	Resilient floor
	Thickness	EN ISO 24346	2 mm
	Wear layer	EN ISO 24340	0.8 mm
	Roll dimensions	EN ISO 24341	2 m x 20 m = 40 m <sup>2</sup>
	Weight	EN ISO 23997	2.5 kg/m <sup>2</sup>
	Indentation	EN ISO 24343-1	≤ 0.10 mm
	Classification for use	EN ISO 10874	34, 43
	Flexibility	EN ISO 24344	Pass
	Dimensional Stability	EN ISO 23999	≤ 0.4 %
	Light fastness	EN ISO 105-BO2	≥ 6
	Castor chair abrasion	EN 425	Pass
	Wear resistance	EN 13845 Annex D	≤ 10% / 50000 cycles
	Chemical resistance	EN ISO 26987	Good
	Under floor heating	EN 12524	Suitable
	Static electric propensity	EN 1815	≤ 2 kV Antistatic
	VOC emissions	CDPH 1350 / Floorscore	Approved



#### Meets the following requirements

- ✓ Slip-resistant
- ✓ Impervious
- ✓ Free from cracks
- ✓ Resistant to disinfectants
- ✓ Able to cove
- ✓ Able to heat weld
- ✓ Combines with Altro Whiterock wall system
- ✓ Meets AIA guidelines
- ✓ Meets FGI guidelines
- ✓ Meets CSA Z8000 guidelines



# Altro Reliance™ 25

## Robust slip-resistant flooring

At 2.5mm thick, Altro Reliance 25 combines proven stain resistance, slip resistance and incredible durability to create a surface capable of enduring high levels of foot and wheeled traffic without compromising performance.

This product is a premium choice in heavy-duty commercial flooring, offering the best slip resistance of our OR solutions.




















Combine with Altro Whiterock wall sheets for areas requiring a seamless, floor-to-ceiling, hygienic surface.

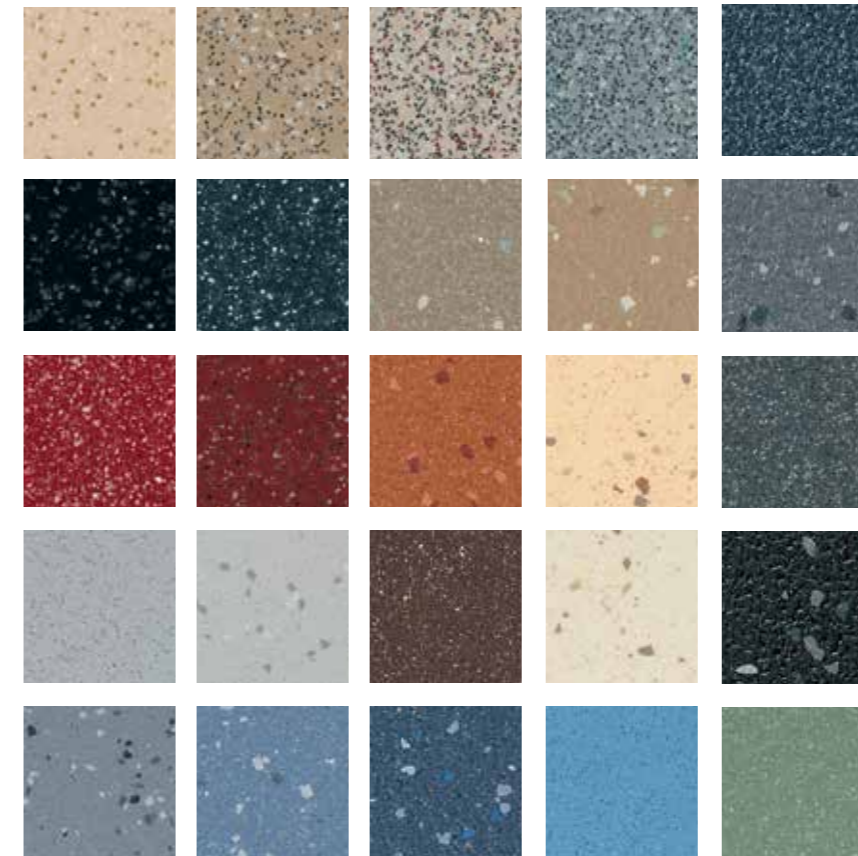
- ✓ 2.5mm thick
- ✓ 2m wide
- ✓ Slip-resistant
- ✓ Withstands 2000 psi
- ✓ 15-year guarantee
- ✓ 25 colours
- ✓ Stain-resistant
- ✓ Low-VOC emitting
- ✓ Non-toxic, non-polluting, no heavy metals



floors

### Technical information

	Fire behaviour tested in acc. with	EN ISO 9239-1 EN ISO 11925-2	≥ 8kW/m <sup>2</sup> Pass
	Classified in acc. with	EN 13501-1	B <sub>s</sub> -s1
	Slip resistance	EN 13893 PTV EN 13845 Annex C EN 16165 Annex B / ASR A1.5	DS ≥ 40 ESf R10
	Sound insulation	EN ISO 140-8	ca. 7 dB
	Flooring type	EN 13845	Safety flooring
	Thickness	EN ISO 24346	2.5 mm
	Wear layer	EN ISO 24340	2.5 mm
	Roll dimensions	EN ISO 24341	2 m x 20 m = 40 m <sup>2</sup>
	Weight	EN ISO 23997	3.2 kg/m <sup>2</sup>
	Indentation	EN ISO 24343-1	≤ 0.10 mm
	Classification for use	EN ISO 10874	34, 43
	Flexibility	EN ISO 24344	Pass
	Dimensional Stability	EN ISO 23999	≤ 0.4 %
	Light fastness	EN ISO 105-BO2	≥ 6
	Castor chair abrasion	EN 425	Pass
	Wear resistance	EN 13845 Annex D	≤ 10% / 50000 cycles
	Chemical resistance	EN ISO 26987	Good
	Under floor heating	EN 12524	Suitable
	Static electric propensity	EN 1815	≤ 2 kV Antistatic
	VOC emissions	CDPH 1350 / Floorscore	Approved



### Meets the following requirements

- ✓ Slip-resistant
- ✓ Impervious
- ✓ Free from cracks
- ✓ Resistant to disinfectants
- ✓ Able to cove
- ✓ Able to heat weld
- ✓ Superior slip resistance
- ✓ Combines with Altro Whiterock wall system
- ✓ Meets AIA guidelines
- ✓ Meets FGI guidelines
- ✓ Meets CSA Z8000 guidelines



# Altro Operetta™

## Smooth flooring

Altro Operetta is a robust floor perfect for medium to high traffic areas. Its smooth profile is ISO cleanroom compliant, and provides the highest available stain resistance with a surface that can be easily cleaned and maintained.

The product boasts a surface profile that is smooth, impervious, free from cracks and crevices, and non-shedding. Built with Altro Easyclean surface technology, Altro Operetta is resistant to disinfectant and other cleaning agents.

Combine with Altro Whiterock wall sheets for areas requiring a seamless, floor-to-ceiling, hygienic surface.

- ✓ 2mm thick
- ✓ Smooth surface, easy-to-clean
- ✓ Withstands 2000 psi
- ✓ 10-year guarantee
- ✓ 37 colours
- ✓ Stain-resistant
- ✓ Low-VOC emitting
- ✓ Meets ISO Class 4 cleanroom requirements
- ✓ Non-toxic, non-polluting, no heavy metals



floors

### Technical information

	Fire behaviour tested in acc. with	EN ISO 9239-1 EN ISO 11925-2 EN 13501-1	≥ 8kW/m <sup>2</sup> Pass B <sub>s</sub> -s1
	Slip resistance	EN 13893 EN 16165 Annex B	DS R10 For enhanced safety, see our ranges that offer sustained slip resistance for life.
	Sound insulation	EN ISO 140-8	ca. 4 dB
	Flooring type	EN ISO 10582	R10 Floor
	Thickness	EN ISO 24346	2 mm
	Wear layer	EN ISO 24340	0.7 mm
	Roll dimensions	EN ISO 24341	2 m x 20 m = 40 m <sup>2</sup>
	Weight	EN ISO 23997	2.66 kg/m <sup>2</sup>
	Indentation	EN ISO 24343-1	≤ 0.10 mm
	Classification for use	EN ISO 10874	34, 43
	Flexibility	EN ISO 24344	Pass
	Dimensional Stability	EN ISO 23999	≤ 0.4 %
	Light fastness	EN ISO 105-BO2	≥ 6
	Castor chair abrasion	EN 425	Pass
	Wear resistance	EN 660-2	Group T
	Chemical resistance	EN ISO 26987	Good
	Under floor heating	EN 12524	Suitable
	Static electric propensity	EN 1815	≤ 2 kV Antistatic
	VOC emissions	CDPH 1350 / Floorscore	Approved



### Meets the following requirements

- ✓ Smooth
- ✓ Impervious
- ✓ Free from cracks
- ✓ Non-shedding
- ✓ Resistant to disinfectants
- ✓ Able to cove
- ✓ Able to heat weld
- ✓ Combines with Altro Whiterock wall system
- ✓ Meets AIA guidelines
- ✓ Meets FGI guidelines
- ✓ Meets CSA Z8000 guidelines
- ✓ USP 797/800 compliant



## Staining

OR floors are consistently exposed to aggressive chemicals. Antiseptics such as Betadine®, Chlorasept™, Rifampin™, DuraPrep™ and Methylene Blue™ as well as industrial cleaners can cause havoc on many surfaces if allowed to sit. Therefore it's critical to specify flooring that has high stain resistance in ORs.

Select finishes with cleaning technology

Specify appropriate colours

Use manufacturer recommended cleaners

Develop standard cleaning protocols

Train cleaning staff

Critical stain areas should have dark insets



Photo credit: Ellereconstruction.com

## Colour insets

Placing a camouflaging colour inset around the operating room table, as a design element, or in other areas of high stain probability, can help reduce the appearance of stains caused by Betadine®. It can also be taken up and replaced without uplifting the rest of the floor.

### Altro Reliance 25 stain results

Chemical	Chemical resistance	Stain resistance after 24 hrs
Sodium Hypochlorite	0	0
Bleach	0	0
Phenol disinfectant	0	0
Hydrogen Chloride (HCl)	0	0
Isopropyl alcohol	0	0
Sulphuric Acid (H <sub>2</sub> SO <sub>4</sub> )	0	0
Hydrochloric Acid	0	0
Betadine® (Povidone-iodine 10%)	0	1

### Altro Suprema stain results

Chemical	Chemical resistance	Stain resistance after 24 hrs
Sodium Hypochlorite	0	0
Bleach	0	0
Phenol disinfectant	0	0
Hydrogen Chloride (HCl)	0	0
Isopropyl alcohol	0	0
Sulphuric Acid (H <sub>2</sub> SO <sub>4</sub> )	0	0
Hydrochloric Acid	0	0
Betadine® (Povidone-iodine 10%)	0	0

### Altro Operetta stain results

Chemical	Chemical resistance	Stain resistance after 24 hrs
Sodium Hypochlorite	0	1
Bleach	0	0
Phenol disinfectant	0	1
Hydrogen Chloride (HCl)	0	0
Isopropyl alcohol	0	0
Sulphuric Acid (H <sub>2</sub> SO <sub>4</sub> )	0	0
Hydrochloric Acid	0	1
Betadine® (Povidone-iodine 10%)	0	1

### Altro Whiterock stain results

Chemical	Chemical resistance	Stain resistance after 24 hrs
Sodium Hypochlorite	0	0
Bleach	0	0
Phenol disinfectant	0	1
Hydrogen Chloride (HCl)	0	0
Isopropyl alcohol	0	0
Sulphuric Acid (H <sub>2</sub> SO <sub>4</sub> )	0	0
Hydrochloric Acid	0	1
Betadine® (Povidone-iodine 10%)	0	0
Ecolab™	0	0
Trichlorethene	0	0



## Disinfecting and maintenance

### Disinfecting versus cleaning

It is a common misconception that disinfecting is the same as cleaning. Differentiating and executing the two properly is important to ensure a healthy, clean operating room.

A dried-on disinfectant residue or film, with all of the bugs it has killed, may make a floor or wall surface sticky. This can attract additional soiling and lead to discolouring or chemically damage the surface it is left on.

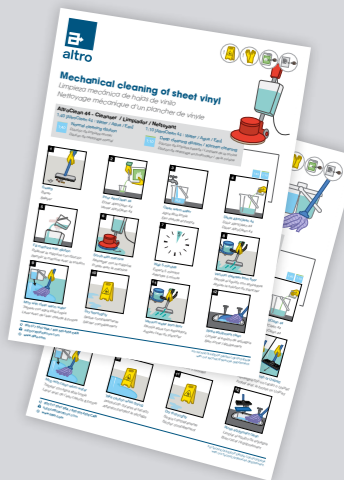
Proper care is essential to ensure floor and wall products perform as intended. It is fundamental that facility teams understand it is just as important to clean the operating rooms as it is to disinfect them.

### Floor and wall maintenance

Routine maintenance is the key to keeping Altro floor and wall products in peak condition throughout their lifetime.

After consulting with hospital facility teams, Altro developed detailed instructions on proper care and cleaning techniques in hygienic areas. The focus is to implement a consistent and effective cleaning procedure that keeps the operating room hygienic and pristine. This results in lower maintenance costs over the lifetime of the product.

Illustrated cleaning cards are also available.



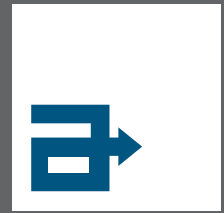


## Samples

If colour choice is critical, please  
request a sample of the material

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