

TOP END HEALTH SERVICES

Royal Darwin Hospital

# Design Guidelines



PREPARED BY

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LATEST REVISION DATE	UPDATED BY
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# 1 RDH Vision:

The RDH Vision for the Design Guidelines is to have a document that will lead upgrades and refurbishments to be done in the future in a logical and systematic way, with a consistent use of materials and fittings throughout. The style guide will ensure that better health outcomes are achieved through the incorporation of previous lessons learnt and best practice materials and finishes. Disadvantaged patients such as Aboriginal and the elderly will be better able to navigate their way through a complex and unfamiliar hospital campus with a logical wayfinding and signage system. Patient ease of use will decrease the burden on staff, as will logical and consistent design choices, helping to assist in workforce retention.

The Design Guidelines is a fluid document that will be continuously updated to encapsulate changes in strategy, evolution of ideas and themes and testing of materials, fixtures and fittings. The document is to be kept current to inform architects and designers on what is currently used at the hospital for upcoming projects within the Hospital campus.

## Strategic Objectives:

- 1 – Promote and protect health and wellbeing
- 2 – Deliver appropriate care to vulnerable people and populations
- 3 – Improve Aboriginal health outcomes
- 4 – Better coordinate and integrate care
- 5 – Strive for clinical and corporate excellence
- 6 – Build a highly skilled and culturally responsive workforce
- 7 – Drive financial sustainability

Some of the major challenges faced by RDH in delivering good health outcomes in the Northern Territory are:

**Closing the Gap:** Improving Aboriginal health as part of efforts to overcome Aboriginal disadvantage more generally poses the greatest single challenge to the Northern Territory and its health care system.

**An Ageing population:** An improvement in life expectancy, as well as a strong trend for older non-Aboriginal Territorians to remain in the NT after they retire, has seen a substantial increase in a demand for services for older people.

**Workforce retention:** The Territory experiences high workforce turnover. It is important that we support local training and education pathways to grow our own workforce and support our Aboriginal workforce, as well as ensure our workplace supports long term career development and retention.

The implementation of rational and cohesive design in the hospital makes a complex and confusing health environment more manageable for both staff and patients through:

- Cohesive and systematic design choices over time throughout the hospital
- An integrated design that makes navigation and use of the space logical and systematic
- Design choices that promote better health outcomes

# 2 Primary Directory

## **Current Version Management**

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# 3 Wayfinding & Signage

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## 3.1 Introduction

### 3.1.1 What is wayfinding?

Wayfinding is a system of visual cues that assist people to find their way through complex built environments such as educational and hospital campuses. A consistent wayfinding system enables people to effectively and efficiently find their way through buildings and public spaces that they are unfamiliar with.

Healthcare campuses present a unique set of navigational challenges. Often, these environments have developed over time and encompass multiple buildings. In addition to being complex spaces, in a hospital many people are stressed, and may also have health problems, speak English as a second language, or be illiterate. All of these things make good wayfinding vital at RDH.



### 3.1.2 Wayfinding at Royal Darwin Hospital

The wayfinding system at RDH has been developed to facilitate ease of navigation for visitors and staff. Easily identifiable features enable a person to facilitate their way through the busy by using cues and associations for departments and levels. Key principles to enable this include:

- Signage with a hierarchy of height of text and numbers, font type, colour, arrows, maps and symbols which are simple and user friendly – simple English and expansion of acronyms where possible
- Material and finishes easy to maintain and robust with wall and floor design to assist with guiding people towards their destination such as distinguishing floor levels with colour guides with landmarks and architectural elements with easily identifiable features.
- Poor wayfinding experience can increase anxiety confusion and frustration. This can also have a negative impact and hidden cost in staff needing to give instructions to visitors and appointment delays.

#### Internal and External Systems

RDH wayfinding integrates themes for both internal and external campus areas which encompass the following;

- Access and Egress, to comply with national codes, which is clear and easily identifiable
- Directional wayfinding to show how to get to different areas
- Arrival signage to indicate arrival at different departments, room and areas
- Colour themes to identify parking and travel corridors, levels or departments to highlight areas of movement and arrival.
- Royal Darwin Hospital have adopted a Centrecore design to highlight the vertical lobbies within the building and giving each floor an identity. This is followed by signage which are ceiling mounted or wall mounted to assist with navigation
- Signage used along streets needs to be large and simple, directional and prominent to the road. Pedestrian signage is more detailed and specific to location and human scale.
- Hierarchy of illuminated and non illuminated building identification signs, pylon and directional signs as well as wall mounted signage and graphics

A signage scheme is successful when it considers the campus holistically from the main identification sign along the road, directional signs, building and building entrance identification and parking signs. The signage needs to provide users and visitors enough information they can navigate through the site from initial entry via vehicle or by foot through to their final destination.

## 3.2 Internal Wayfinding

### 3.2.1 Centrecore Design and Colour association

The Centre Core and stairwell is utilised by visitors, patients and staff to travel vertically through the hospital. It contains open stairs and lift lobbies at each level. The unique feature of this space is the central stair spine which identifies each level with its own unique colour and large number. The colour is reflected in material, signage and graphics, and paint colours for that level.

Secondary number per floor level



Primary number per floor level

3D image of floor specific wayfinding

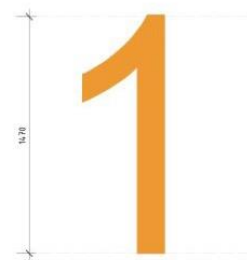
Royal Darwin Hospital - Centre Core Re-furbishment							Northern Territory Government
COLOUR KEY		REV C 04 /10/17					
FLOOR LEVEL	PANTONE COLOUR	FEATURE COLOUR	DOOR COLOUR	FEATURE VINYL	STAIR SPINE GRAPHICS	PERSPEX COLOUR	
8	Pantone 479 U PANTONE 479 U	Dulux Clay Dust S13D4	Dulux Clay Dust S13D4	Mipolam Elegance Hazelnut 0329	8	Plexiglas Clear-Taupe 8M503C1	
7	Pantone 2259 C PANTONE 2259 C	Dulux Grass Court S25H9	Dulux Grass Court S25H9	Mipolam Elegance Apple 0339	7	Perspex Green 650	
6	Pantone 2039 C PANTONE 2039 C	Dulux Licked Lick S48H8	Dulux Licked Lick S48H8	Mipolam Elegance Plum 0331	6	Perspex Red 4415	
5	Pantone 2090 C PANTONE 2090 C	Dulux Purple Wisdom S45H9	Dulux Purple Wisdom S45H9	Mipolam Esprit Lavande 5368	5	Perspex Violet 886	
4	Pantone 2985 U PANTONE 2985 U	Dulux Norfolk Sky S35H2	Dulux Norfolk Sky S35H2	Mipolam Elegance Bilberry 0341	4	Akrl Essence Blue	
3	Pantone Process Yellow C PANTONE Process Yellow C	Dulux Dandelion Yellow S16H8	Dulux Dandelion Yellow S16H8	Mipolam Elegance Ananas 0333	3	Perspex Yellow 2252	
2	Pantone 2388 C PANTONE 2388 C	Dulux Cook's Bay S35H9	Dulux Cook's Bay S35H9	Mipolam Elegance Bluecrop 0349	2	Perspex Blue 727	
1	Pantone 1505 C PANTONE 1505 C	Dulux Carved Pumpkin S11H9	Dulux Carved Pumpkin S11H9	Mipolam Elegance Kumquat 0702	1	Perspex Orange 363	
G	Pantone 376 C PANTONE 376 C	Dulux Sunny Green P19.H7	Dulux Stony Creek S15A4	Mipolam Elegance Kiwi 0338	G	Perspex Green 6205	
LG	Pantone 1535 CP PANTONE 1535 CP	Dulux Desert Soil S10.F8	Dulux Stony Creek S15A4	Mipolam Elegance Cacao 0698		Plexiglas Caramel Gold 5PY0	

Centrecore Floor colour association by level



### 3.2.2 Centrecore Stair spine primary number

- Wall mounted sign wrapped around stair well central wall either side
- 1470mm high laser cut 8mm acrylic number
- Font - Arial
- Font colour per floor level refer to key legend above
- Edge of number to wrap around spine wall 120mm
- Relate wall numbers to corresponding floor level



### 3.2.3 Centrecore Stair spine secondary number

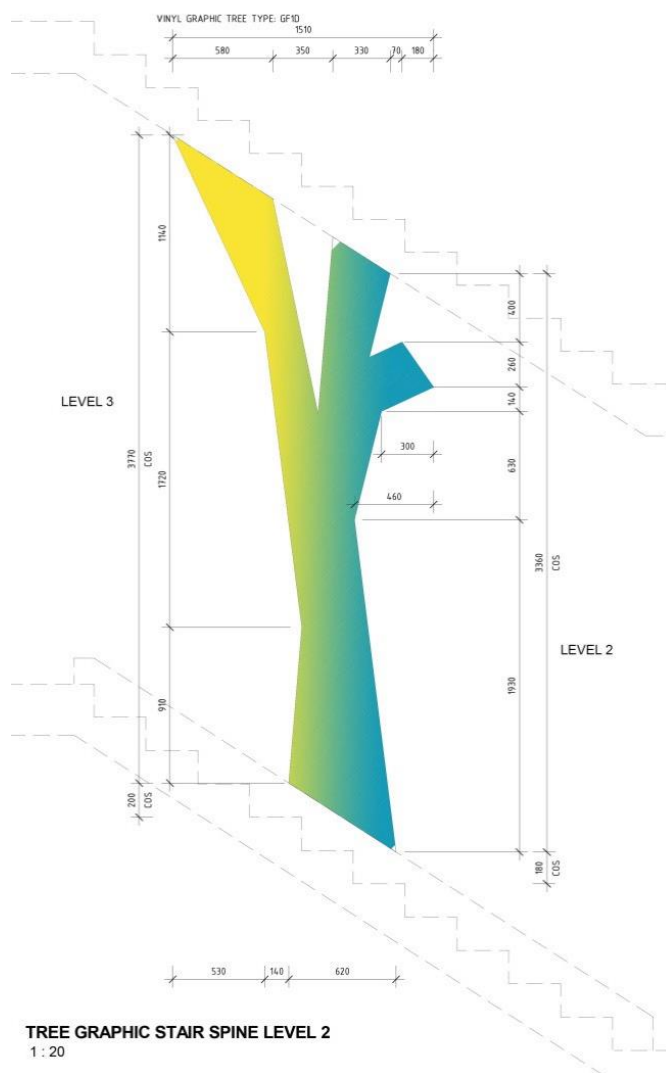
- Wall mounted sign to the external wall of the Centrecore lobby area
- 400mm high laser cut 8mm acrylic number
- Font - Arial
- Font colour per floor level refer to key legend above
- Number to be mounted nominally 1450mm high to underside of number
- Relate wall numbers to corresponding floor level



### 3.2.4 Tree Graphic in stair well

To create playful interest, tree graphic cut vinyl to be installed in central spine wall. This will assist with colour reference and way finding and add visual interest to the space. The tree graphic changes per floor level to show growth and the colour will graduate and blend between floor levels.

- Wall mounted number fixed to full height wall in lift lobby
- 400mm high lasercut 8mm acrylic number
- Font - Arial
- Relate wall numbers to corresponding floor level



## 3.3 Internal Signage

### 3.3.1 Internal Signage Design

Internal signage and wayfinding is a combination the following types:

- Wall mounted signage are predominantly location signage indicating you have reached your destination.
- Ceiling hung signage is directional signage and usually located in corridors.
- General signage mounted to walls/ doors indicates either room names or physician name.
- Photographic images mounted to walls assist with demonstrating different levels and break up long walls.



### 3.3.2 Department Signage Colours

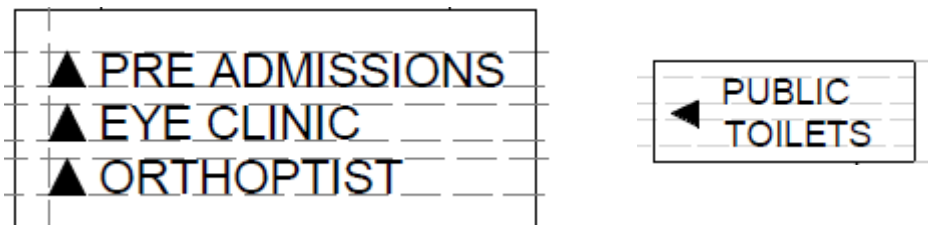
The following colours have been formulated by the NT Government to identify the three major Health departments. Offices and Campuses use these colours as part of their way finding themes to differentiate the different sectors. RDH is predominantly TEHS (Top End Health Service) as shown in the images on the right.



	DoH	CAHS	TEHS
	PMS <b>646</b>	PMS <b>175</b>	PMS <b>354</b>
CMYK >	.72% .31% .3% .12%	.0% .65% .100% .60%	.80% .0% .90% .0%
RGB >	.94% .138% .180%	.123% .58% .0%	.31% .178% .90%
HTML >	<b>#5E8AB4</b>	<b>#7b3a00</b>	<b>#1fb25a</b>

### 3.3.3 Internal Signage Arrows

Arrows should be solid, with the longer portion of the triangle pointing towards the direction of travel. The height of the longest side should be equal to the height of the capital letter of the text which it accompanies in most cases, although there will be some exceptions. Below are some examples.

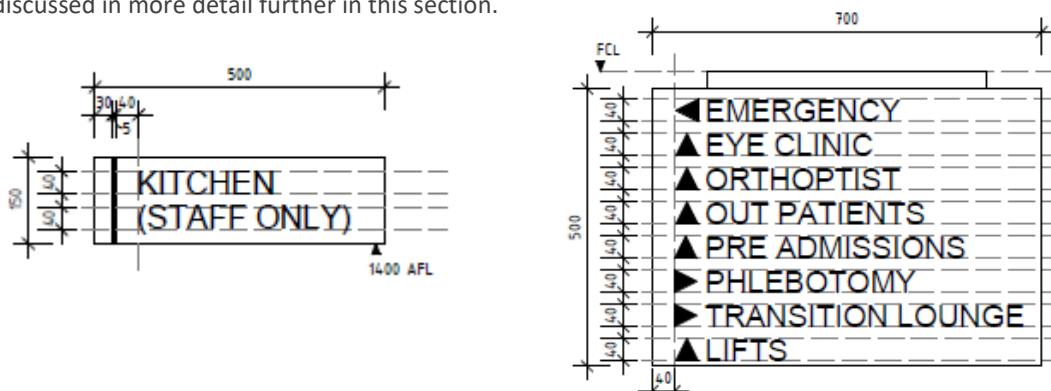


### 3.3.4 Signage Holders and mounting

New signage mounting systems should match existing signage brackets and hangers for consistency. The transparency of the signage panel needs to be considered if it is wall or ceiling hung to reduce shadowing of double sided sign plates. The material and colour is to match similar signage systems in the same vicinity. The width and height of the sign is determined by the extent of lettering required for the sign. The sign should be balanced with text centred vertically.

### 3.3.5 Font Height and Set Out

The text height for ceiling suspended or wall mounted acrylic signs is to be the same height with equal spacing between each line. The text justification is from the left hand side of the signage panel and 40mm from the wall mount bracket line mark. This is discussed in more detail further in this section.



A smaller font height is required for sub directory, abbreviations or break up of ward locations for some areas. The text height is equal to 3/5 of the main text height as shown below. If main text height is 40mm then sub text is 24mm.

WARD	Floor
OUTPATIENT CLINICS GYNAECOLOGY PAEDIATRIC ANTENATAL	8
NATIONAL CRITICAL CARE & TRAUMA RESPONSE CENTRE	8
RENAL ( KIDNEY / DIALYSIS ) 7A	7

### 3.3.6 Signage Typeface Generally

#### Font

Arial Regular is the standard typeface for the RDH Signage system, and is the default font that should be used generally.

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

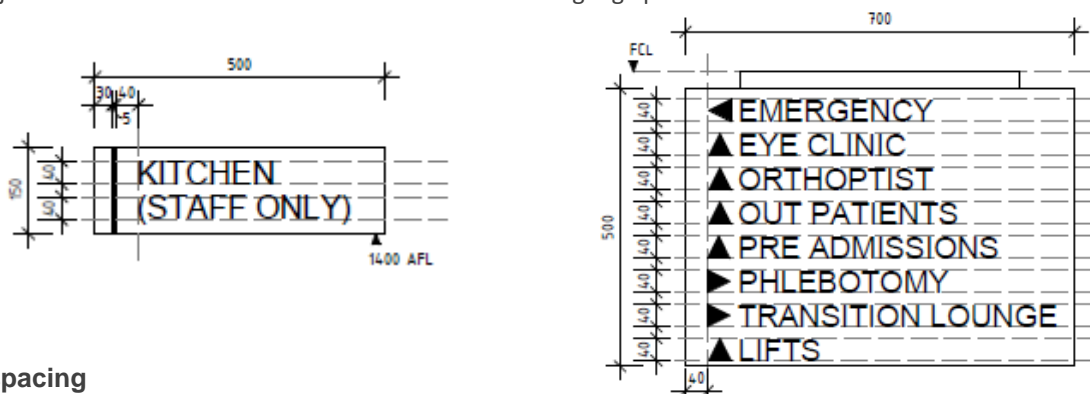
1234567890

#### Style

Departments, wards, and signage generally should be in all caps ie EMERGENCY DEPARTMENT, PAEDIATRICS, while rooms and staff names can be in upper/lower case format.

#### Height

The text height for ceiling suspended or wall mounted acrylic signs is 40mm high with equal spacing between each line. The text justification is 40mm from the left hand side of the signage panel and 40mm from the wall mount bracket rebate.



#### Letter spacing

Normal letter spacing is utilized generally, and the readability ratio factor should be around 1:25. Word spacing shall be equivalent to the width of a lower case "v".

Normal letter spacing should not be used when letter forms are to be illuminated as light bleed causes letters to fuse together visually.

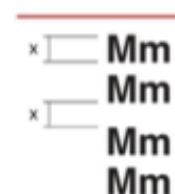
Distance letter spacing shall be utilised when the content is intended for readability at greater viewing distances than normal letter spacing allows. The readability ratio factor should be around 1:40. Distance letter spacing shall be used for all exterior and illuminated signs.

#### Interline Spacing

Interline spacing will generally be noted on sign type drawings. As a general rule, line spacing shall be no less than ½ the height of the upper case letter form.

#### Paragraph Spacing

Paragraph spacing will generally be noted on sign type drawings. As a rule, paragraph spacing shall be no less than the height of the upper case letter form.



## Alignment

Text shall be left justified with a 40mm off set as noted already, though certain exceptions can apply.

As a rule all copy placed on inserts, changeable directional modules, listing strips, overhead panels, and changeable exterior panels shall be vertically centred (equal margins top and bottom). Graphic symbols used in square format shall be centred on four sides.

## Indentation

In some instances indentation is required where words do not fit on the same line or a sub directory is required. The tab space for the indentation will be 40mm.

### 3.3.7 Braille and tactile

Tactile way finding is incorporated to comply with the Building Code of Australia and Australian Standards. This usually includes usage on amenity signage, stairs, lifts, exits, external building pathways, road crossings, and public transport locations. Visually impaired persons may require additional assistance to way find by visiting a reception counter.

Concrete tactile pavers are used externally and rubber tiles internally both complying with the illuminance contrast requirements for AS1428.1. Individual tactile studs are not approved for use at RDH. The tactile tile should be integrated into the flooring finish to be compliant with trip hazards under the Building Code of Australia and AS1428.1.

## 3.4 Internal Signage Types

### 3.4.1 Wall Mounted Directory signage

Wall mounted Hospital Directory board

- Wall mounted digitally printed sign
- No backing plate – direct fix to wall with interchangeable plates 42mm high with vandal proof side lock system
- Font – Arial Regular all capital letters
- Text Heights Royal Darwin Hospital letters – nominally 40mm

Hospital Directory letters – nominally 60mm, and Individual location letters - 21mm

- Map is digital print on Diabond backing.



Wall Mounted directory board

- Wall mounted sign
- 3mm Spectrum Green acrylic Marga Citra and 347 back plate
- Font – Arial Regular all capital letters
- Height Varies
- White die cut cast vinyl

WARD	Floor
OUTPATIENT CLINICS	8
GYNAECOLOGY	
PAEDIATRIC	
ANTENATAL	
NATIONAL CRITICAL CARE & TRAUMA RESPONSE CENTRE	8
RENAL ( KIDNEY / DIALYSIS ) 7A	7
CONSTANT CARE	7
MATERNITY 6A	6
DELIVERY SUITE	6
NEONATAL SPECIAL CARE	6
NURSERY	
PAEDIATRIC / ADOLESCENT	5
MEDICAL / REHABILITATION 4A	4
MEDICAL	4
ORTHOPAEDICS 3A	3
GENERAL MEDICAL 3B	3

### 3.4.2 Services Counter Signage

Destination Signage for service counters

- Wall mounted sign
- No backing plate – direct fix to wall
- Font – Arial Regular all capital letters
- Height 150mm
- 10mm Black acrylic individual letters



### 3.4.3 Ceiling Hung Signage

Suspended ceiling signage is green acrylic backed with white text and arrows.

- Ceiling mounted sign
- Gloss Green Perspex back board PMS 354U
- Font – Arial Regular all capital letters
- Height varies depending on content of sign
- White vinyl cut letters
- Generally clearance under signage should be 2400mm and exceptions can be made to allow for safe movement below the sign. Confirm with the project certifier if there are concerns.

Directional Signage for the Emergency ward

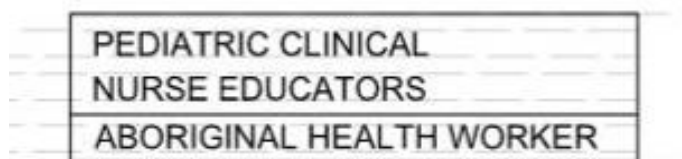
- Ceiling mounted sign
- Gloss Red Perspex backing plate PMS 185C
- Font – Arial Regular all capital letters
- Height of overall sign varies depending on content
- White vinyl cut letters



### 3.4.4 Room Signage – Wall or door mounted

Anodised Aluminium Panel, Black Vinyl lettering, 20mm high, Font colour black. 25mm high vinyl cut lettering

Mounted at 1400mm high on door or wall adjacent door.



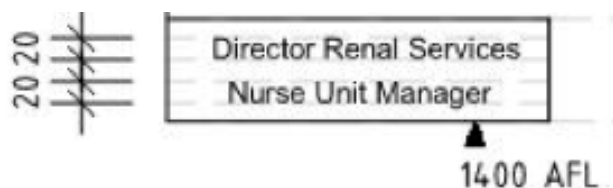
### 3.4.5 Office Door mounted signage

#### Office signage example

Anodised Aluminium Panel, 20mm high Black Vinyl lettering, 20mm, Font colour black

Generally to be mounted at 1400mm high on door or wall adjacent to door.

An interchangeable name plate panel can be added below this upon the requirements of the hospital.



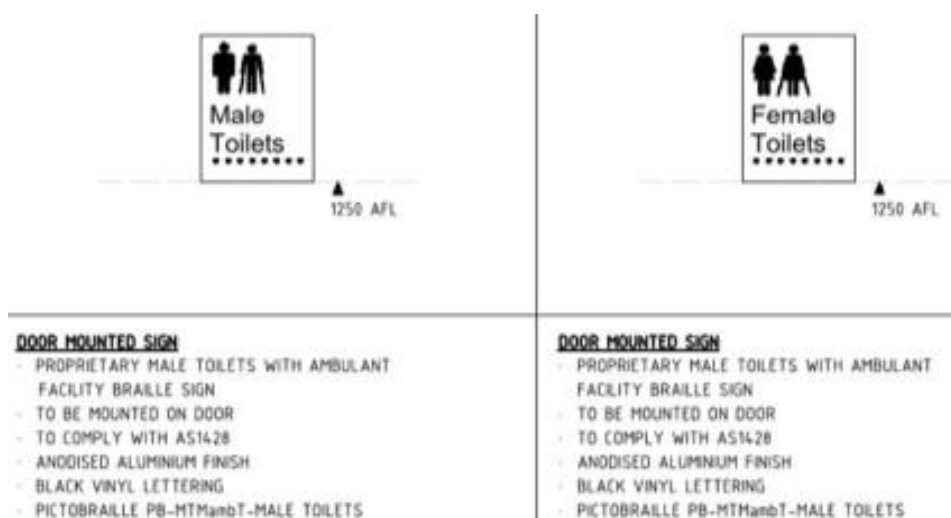
### 3.4.6 Statutory Signage

Statutory signage is to comply with the relevant codes and includes exit signs, egress signs, braille and tactile indicators for ablutions, lift call buttons and access points to stairs. These are referenced in the Building Code of Australia and specified in the relevant Australian Standards. Tactile way finding includes external building pathways, road crossings, and public transport locations. Visually impaired persons may require additional assistance to way find by visiting a reception counter. Confirm with the hospital if additional braille or tactile use is required.



Accessible signage to comply with AS1428.1- AS1428.4. Proprietary Pictobrilie signage with braille to be mounted on or next to ambulant and accessible facility doors as required to code requirements.

The signage plate is anodised aluminium with raised braille and black graphics and text as shown above.





## 3.5 External Signage

### 3.5.1 Types of Signs

The main identification sign for a medical centre should be a large scale illuminated sign. This can be an internally illuminated monolith sign or a masonry wall with letters that are illuminated with floodlights. Urban facilities main identification sign or letters may be directly on the building and should be directly illuminated as well. Internally illuminated signs should be considered for those locations where important information and directions need to be communicated at night as well as the day. This would typically be the main identification sign, the main directional signs at the entrance to the site and along the primary path of travel, buildings and entrances that have public activity in the early morning, late afternoon and evening.



A non-illuminated sign that is illuminated with floodlights can be effective at night. Typically this is a less expensive way to obtain an illuminated sign, but the ongoing maintenance will be considerably higher as ground based lights frequently get damaged. Non-illuminated signs with reflective letters will function quite well for secondary signs at night. It is a good practice to make all the exterior signs have reflective letters as that will insure the best possibility of being read regardless of a sign's importance.



### 3.5.2 Sizes of Signs

Signs that are to be read from a moving car need to be larger than signs that are read by a driver that is stopped or parked. As the speed of a car increases, the size of a sign needs to increase. Signs with important messages also need to be larger. Additionally, the further the distance the sign needs to be read, the larger it needs to be. A sign that is too small will often be ignored because they can't read it in the time taken to approach the sign. A sign that is too large will never be an annoyance because everyone can read it. Signs directed to pedestrian traffic can be smaller due to speed of travel. Despite this, they still have to be large enough to be read to minimise stopping while reading it. Signs placed close to a walkway can be smaller in scale, but care must be taken to not make them so small that people don't notice them. If in doubt regarding a size decision, choose the next larger size. In the Northern Territory every effort should be made to incorporate visual symbols into signage, as a large percentage of the population does not have English as a first language or are illiterate.

### 3.5.3 Colours of Signs

Generally signs follow internal signage colours. Emergency department is Red, Entry signage or way finding signage pointing toward the entry is Blue and parking signage is Green.

### 3.5.4 Viewing Distance Guide for Text size selection

The following charts will provide a guide in determining the size of lettering to be used in relation to the distance from which the sign will be read.

#### TEXT

VIEWING DISTANCE UP TO:	LETTER HEIGHT	APPLICATION
7.5m	25mm	Pedestrian
12m	40mm	Pedestrian
15m	50mm	Pedestrian
24m	75mm	Vehicle
33m	100mm	Vehicle
48m	150mm	Vehicle
75m	225mm	Vehicle
97m	300mm	Vehicle
150m	450mm	Vehicle
195m	600mm	Vehicle

**Note: Signage for vehicle viewing must have a minimum letter height of 75mm**

#### SYMBOLS

VIEWING DISTANCE UP TO:	SYMBOL HEIGHT
7.5m	75mm
10.5	100mm
15m	125mm
18m	150mm
30m	200mm
34.5m	225mm
39m	250mm
45m	300mm

### 3.5.5 Hospital Procedural Signage

Each department will have requirements for procedural signage to alert or remind staff of obligations or processes to follow as they move about the different areas. Take note of existing signage and request whether this signage forms part of the brief or whether the user will arrange these signs after hand over. Examples of these include;

- Health and Hygiene signage for infection control
- Identification of sterile and non-sterile areas
- Department Specific Procedural signage such as WHS specific requirements
- Staff only areas
- Designated trolley parking areas
- Keep clear areas etc
- **No bicycles, skateboard and rollerblades to carpark/ ramps**

### 3.5.6 Nurse Call and Emergency Call System

Royal Darwin Hospital uses Austco nurse call systems and display.

# 4 Art & Graphics

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## 4.1 Art and Graphics

### 4.1.1 Art

RDH have commissioned an artist for specific paintings and are mounted in the Main Entry foyer. Identifying locations in public areas for the artwork needs to consider security and vandalism of artwork.



### 4.1.2 Graphics

Throughout the hospital graphic design is prevalent on walls and glazing. There are three different applications of wall graphics as listed

- Graphic film applied to translucent frosted film
- Graphic film applied to mirror 1 way tint.
- Graphic film applied to walls are to be digitally printed latex (water bourned) high resolution polymeric wall vinyl – latex inks no VOCs. **Matte** over lamination and applied to Acrovyn acrylic backing

Images for use in the hospital must have copyright permission from the supplier or author and an emphasis is on endorsing local artists and photographers. The 3D images used in the Centrecore have been sourced from Paul Arnold and Louise Denton Photographers.



Image applied to 1 way mirror tint film

Image applied to Frosted film



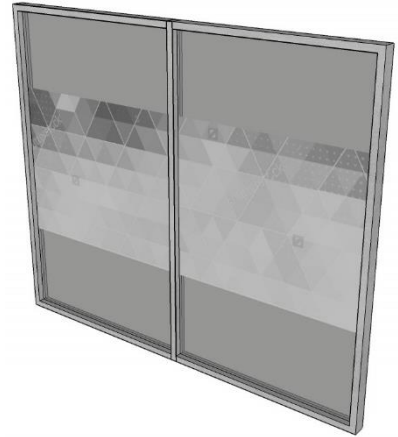
3d image of photographic film applied to wall in lift lobby



The table below is indicative of the graphics films used for current renovation work and final designs are to be approved by the project team and user group for each project.

GRAPHIC FILM SCHEDULE			
LOCATION	DESCRIPTION	COLOUR	IMAGE
External Window Film	Grey Scale Shutterstock Image printed on 3M Haze film-Etched Finish (314) Film Shutterstock Image ID: 98753633 Contractor to purchase High-Res image file suitable for application (Pola Seal)	Splodges: To Match Dulux Milton Moon (PN2G5) Gaps Between Splodges: Translucent	
Internal Window Film	Greyscale Shutter Stock Image printed on 3M Haze film-Etched Finish (314) Film (Pola Seal)	Image: Shutterstock Image ID: 197358071 Contractor to convert original image to greyscale	 <small>www.shutterstock.com · 197358071</small>
Decals	Sola Seal	Avery 5500 QM Translucent Films	
Frosted Film	Sola Seal	3M Frosted Crystal	
<del>Mirrored One way Film</del>	<del>Sola Seal</del>	<del>Mirrored one way film</del>	
Graphic Print on One Way Film	Bleux Ph: 02 9380 6544	Mirror Tint Film Design: Trubridge Crystalia Dark Blue Code: MRT-CRY-BLT	
Graphic Print on Frosted Film	Bleux Ph: 02 9380 6544	Frosted Film Design: Trubridge Crystalia Dark Blue Code: FFS-CRY-DBL	
Graphic print on wall	Sign City NT	Digitally printed latex (water bourne) high resolution polymeric wall vinyl – latex inks no VOCs overlamination with <b>matte overlaminate</b> . <u>Provide proof prior to manufacture</u>	Photographic image, different image per floor level Situated in lift lobby area

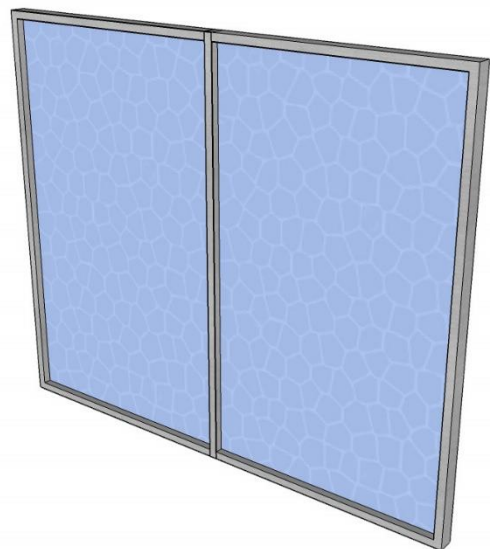
WF2 vinyl decal on window decal on 3M Haze film-Etched Finish Shutterstock  
ID 197358071 (convert to grey scale)



WF6 graphic print on mirror 1 way film  
WF7 Graphic print on Frosted film  
Bluex Trubridge Crystalia Dark Blue



WF1 Grey Scale Shutterstock Image printed on 3M Haze film-Etched  
Finish Film  
Shutterstock Image ID: 98753633  
(Transparent gaps between splodges)

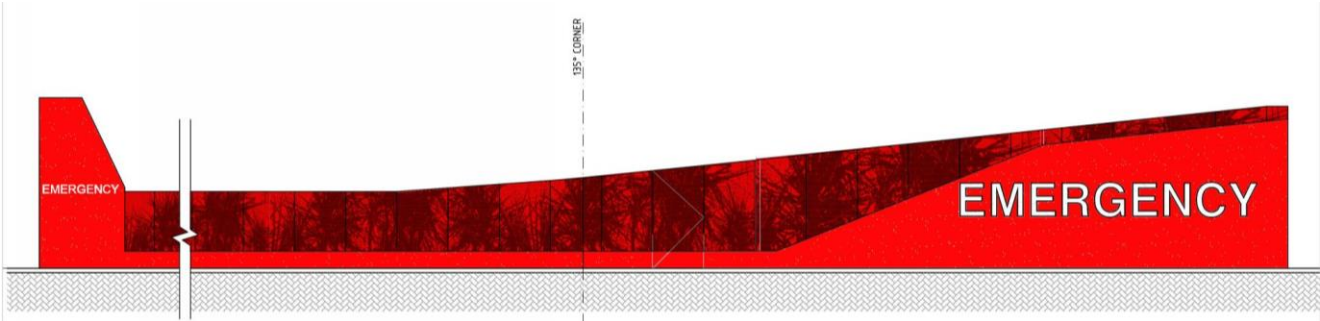




Emergency Entry

Powdercoat Dulux Alphatec Signal Red

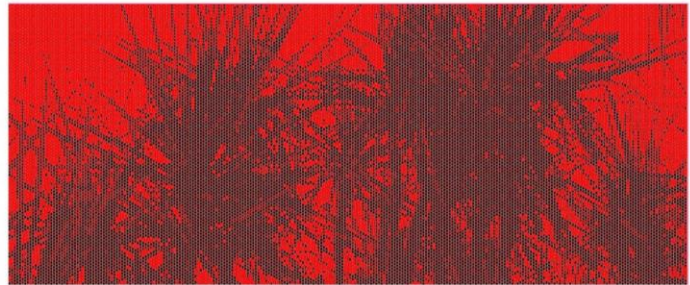
Perforated metal screen with image of Pandanus silhouette is a custom made screen from LockerGroup Picperf



ENTRY RIBBON ELEVATION (1)

SCALE 1:100

NOTE: THIS IS NOT A TRUE ELEVATION, RIBBON FLATTENED OUT TO SHOW DESIGN INTENT.



# 5 Internal Finishes

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## 5.1 Internal Finishes

### 5.1.1 Internal Finishes

Internal finishes have been selected with robustness, Impact resistance and resilience in mind. Anti-Microbial finishes should be considered where possible. Coved vinyl skirtings for infection control, R10 or R11 non-slip vinyl to wet areas

Internal finishes relate to all surfaces including:

- 5.1 Floor finishes
- 5.2 Paint finishes
- 5.3 Wall Panels, High impact wall linings, corner guards
- 5.4 Joinery finishes

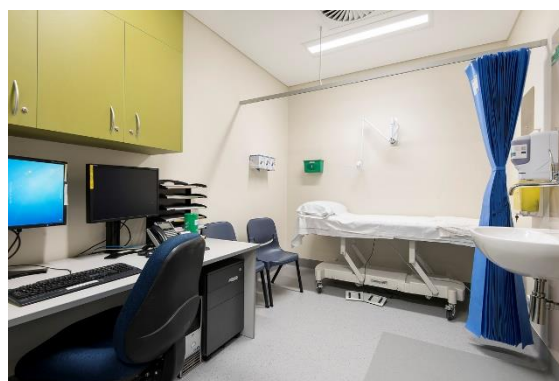
### 5.1.2 Floor Vinyl

Resilient. Homogenous vinyl floor finishes are required throughout the hospital Ideally suited to heavy traffic areas

- Anti-Microbial
- Polyurethane reinforcement
- Polish free maintenance regime
- Fully welded seams
- Fire rated

Changes in colour should be used to assist way finding and defining circulation, destinations, waiting areas, and zones that require a higher level of safety around wet areas.



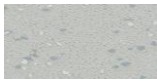

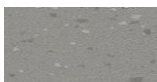


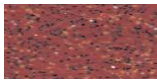
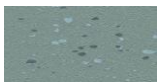


Non slip vinyl minimum R10 for wet areas. Wet areas inside an office will have a non-slip vinyl around the wet fixture as per the Health Design Guidelines.




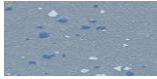



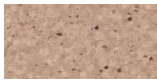
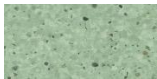
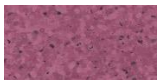

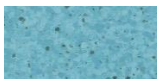



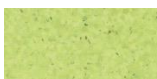

### 5.1.3 Floor Vinyl Selections

The following selections have recently been approved for use for the L5 Paediatrics upgrades, Centrecore refurbishment, Out Patients upgrade and Emergency and Main Entry upgrades. If patching is to occur in some older areas Tarkett Granite has been used previously. Colours may vary so please check with the supplier to colour match. All new vinyl is to be Polyfloor. Some areas in Bathrooms and showers require a higher slip rating and vinyl with a raised pattern can be used. Refer to the Health Facility Guidelines and BCA for requirements.

#### FLOOR VINYL SELECTION SCHEDULE

FLOOR VINYL				
LOCATION	BRAND	DESCRIPTION	COLOUR	IMAGE
Main vinyl L5 lift lobby L5 Patient Bedrooms	Polyflor	Pearlazzo PUR	9718 Rain Cloud	
Feature inset vinyl	Polyflor	Pearlazzo PUR	9703 Chalkburst	
Bathroom	Polyflor Non Slip vinyl	Polysafe Verona R10 slip rating	5202 Rainstorm	
Vinyl (Blue)	Polyflor	Pearlazzo PUR	9720 Ocean Ripple	
Vinyl (Yellow)	Polyflor	Pearlazzo PUR	9721 Sunrise	
Bathrooms L5 Patient Bedrooms & other rooms wet areas	Polyflor Non Slip vinyl	Polysafe Verona R10 slip rating	5203 Dolphin Grey	
Commercial Kitchen	Altro Flooring safety floor	Altro Stronghold 30 P 5 R12 slip rating	K30421 Midnight	
Level 5 – Patient room Entry	Polyflor	Pearlazzo PUR	9717 Autumn Fire	
Level 5 – Patient room Entry Wet areas	Polyflor	Polysafe standard PUR	4120 Antique copper	
Level 5 – Patient room Entry	Polyflor	Pearlazzo PUR	9708 Alpine meadow	
Level 5 Patient room Entry Wet Areas	Polyflor	Polysafe Verona	5211 Seagrass	
Level 5 Corridors generally	Polyflor	Pearlazzo PUR	9716 Toasted Almond	
Level 5 Corridors – Wet areas	Polyflor	Polysafe Verona	5212 Biscotti	

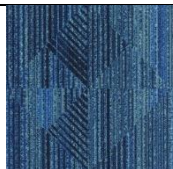


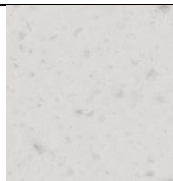
## FLOOR VINYL CONTINUED

LOCATION	BRAND	DESCRIPTION	COLOUR	IMAGE
Level 5 Central Staff areas	Polyflor	Pearlazzo PUR	9722 Purple Crush	
Level 5 Central Staff areas – Wet areas	Polyflor	Polysafe Verona	5208 Horizon Blue	
Level 5 other rooms	Polyflor	Pearlazzo PUR	9704 Mineral	
Level 5 Lounges, education centre & media room	Polyflor	Pearlazzo PUR	9713 Truffle	
Vinyl Planks staff rooms	Polyflor	Expona Superplank	1912 Blond Limed Oak	
Level 8 Feature inset vinyl	Gerflor	Mipolam Elegance	0329 Hazelnut	
Level 7 Feature inset vinyl	Gerflor	Mipolam Elegance	0339 Apple	
Level 6 Feature inset vinyl	Gerflor	Mipolam Elegance	0331 Plum	
Level 5 Feature inset vinyl	Gerflor	Mipolam Esprit	5368 Lavande	
Level 4 Feature inset vinyl	Gerflor	Mipolam Elegance	0341 Bilberry	
Level 3 Feature inset vinyl	Gerflor	Mipolam Elegance	0333 Ananas	
Level 2 Feature inset vinyl	Gerflor	Mipolam Elegance	0340 Jambolan	
Level 1 Feature inset vinyl	Gerflor	Mipolam Elegance	0702 Kumquat	
Ground Feature inset vinyl	Gerflor	Mipolam Elegance	0338 Kiwi	
Lower Ground Feature inset vinyl	Gerflor	Mipolam Elegance	0698 Cacao	

### 5.1.4 Carpet

Where carpet tiles are installed, Anti Microbial treatment is required. Generally select loop pile or tufted textured Loop solution dyed 100% Nylon type 6 carpet tiles with a polymer PVC free backing for heavy traffic use.

#### CARPET, SKIRTING AND TRIM SELECTIONS SCHEDULE

FLOOR VINYL CONTINUED				
DESCRIPTION	BRAND	DESCRIPTION	COLOUR	IMAGE
Carpet Tiles with Anti-Microbial treatment	Ontera	Southern Lights Magnetic <u>With Inhibita Anti-Microbial treatment</u>	Seal Grey (Linea Lay pattern) SKU948	
Carpet Tiles with Anti-Microbial treatment	Ontera	Pentomino Angle <u>With Inhibita Alphasan Anti-Microbial treatment</u>	Glide (Monolithic Lay pattern)	
Carpet Tiles with Anti-Microbial treatment	Ontera	Pentomino Poly <u>With Inhibita Alphasan Anti-Microbial treatment</u>	Glide (Monolithic Lay pattern)	
Carpet Tiled Entry Mat with Anti-Microbial Treatment	Spectrum Floors	Nuway Classic Recessed Entry Mat 17mm Thick with Module 2 Closed Scrapper Bars	Classic, Aluminium Scrapper Bars	
Carpet Tiled Entry Mat with Anti-Microbial Treatment	Ontera	Wombat <u>With Inhibita Anti-Microbial treatment</u>	Greybat 870	
Vinyl Skirting	Polyflor	150mm High Feather Edge Skirting	Select from Floor vinyl list	
Coved Vinyl		150 high to match floor vinyl		
Timber Skirting		100mm High x 19mm thick Painted Timber Skirting	To match wall colour	
Solid Surface Skirting	Staron	150mm high	Aspen Glow AG636	
Floor Trim / Joint – feather screed to junction strip. To be installed at all junctions between carpet and vinyl	Spectrum Floors	ETR302 Floor Trim or similar		

### 5.1.5 Paint Finishes

Painted surfaces in the hospital continue the themes defined for wayfinding by using neutral general wall colours as well as feature colours to highlight elements such as architectural elements, doors, graphics, and destinations areas

### 5.1.6 Wall paint

Paint finishes used for general walls require a hard wearing wash and wear acrylic finish that allows you to wipe away most common marks, scuffs and stains. It should have Low VOC (Volatile Organic Compounds) odours contribute to atmospheric pollution. Low VOC paint must be used where possible.

The following area list of colours used recently at RDH. Refer also to the Centrecore colour code schedule in Wayfinding section for colour selections for each floor.

PAINT LOCATION	COLOUR SELECTION
Wall Paint – General	Ecru Half Strength (P15D1H)
Feature door/ wall Red	Dulux Paraburdoo
Feature door/ wall Taupe	Dulux Apparition
Feature door/ wall Green	Dulux Lettuce Mound
Feature door/ wall Dark Blue	Dulux Tidal Wave (P36E7)
Feature door/ wall Taupe /Brown	Dulux Stony Creek (P15A4)
Feature door/ wall Yellow	Dulux Capital Yellow (P15G7)
Feature door/ wall Brown	Dulux Log Cabin (P10A8)
Feature door/ wall	Dulux Blue Antarctic (P36E5)
Feature door/ wall Green	Dulux Banana Palm (P19E6)
Feature door/ wall Blue	Dulux Wink (P38E4)
Feature door/ wall Green	Dulux Mamba Green (P22H9)

### 5.1.7 Ceiling Paint

Matt ceiling paint finish with mould protection (Low VOC). Generally ceiling are to be flat Ceiling White.

### 5.1.8 Doors and Trims

Super Enamel Semi-Gloss which is oil based and hard wearing. It provides a tough finish for high traffic areas. Note requirement in AS1428.1 for minimum luminance contrast of 30% between at least one of the following.

- Door leaf & door jamb;
- Door leaf & adjacent wall;
- Architrave & wall;
- Door leaf & architrave; or
- Door jab & adjacent wall

Minimum width of the area of luminance contrast to be 50mm as per the Building Code of Australia and AS1428.1

### 5.1.9 High Impact wall paint

Where high traffic areas are located and where wall vinyl is applied to a wall, high impact wall paint should be used. i.e. stair well wall and lift lobbies.

A Wash & Wear style Semi-Gloss paint to withstand a high amount of wear and tear should be specified as well as having easy clean properties.

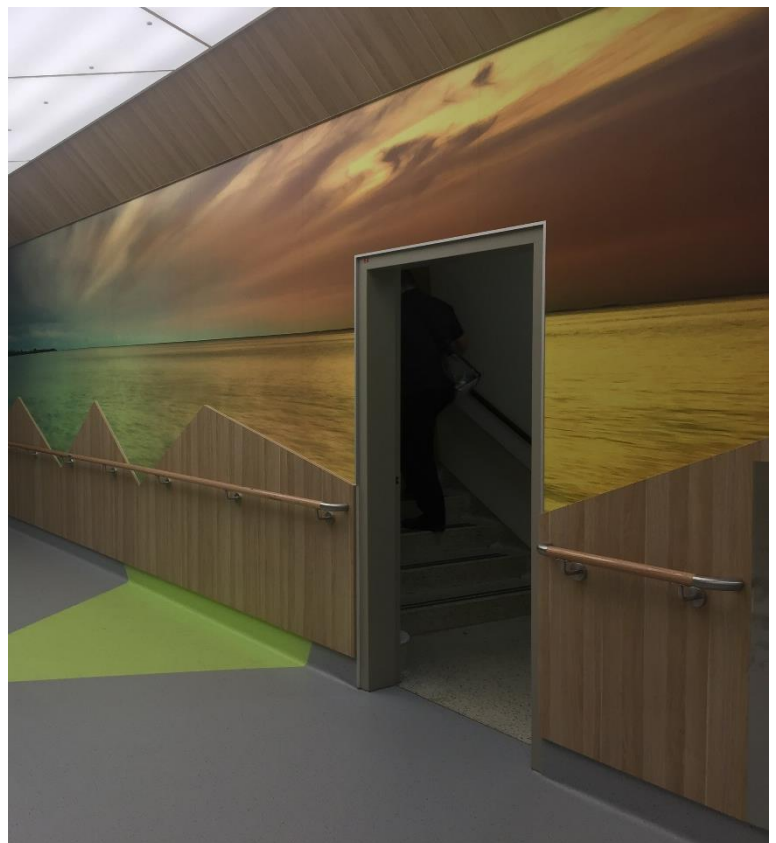
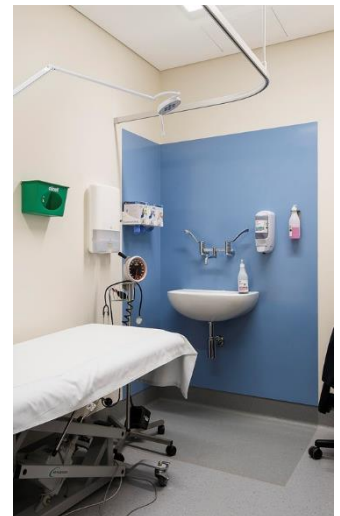
### 5.1.10 Wall linings & Wall Protection

High Impact wall linings are to be selected for high traffic areas and corridors where damage can be made such as moving of hospital beds, trolleys and bin storage areas. Wall protection is also to be used around hand washing areas where paper towels and bins are used as the foot operated bins cause damage to the wall lining. The selections should be easy to clean and washable which are paramount to hospital hygiene practices

Other items that assist with wall protection for impact include corner guards, bumper rails, door protection and door lining and chair rails.

The following are a selection of already used protection methods around the hospital.

Wall protection behind hand basins is to be centred over the basin and typically 1200mm wide.





## WALL PROTECTION SCHEDULE

WALL PROTECTION				
LOCATION	BRAND	DESCRIPTION	COLOUR	IMAGE
<b>FEATURE AREAS WALL PROTECTION</b>				
Walls to lift lobby	Polytec	High Pressure Laminate on MDF	Amaro Sheen	
Timber inset/ timber ceiling/ Tree shape	Polytec	High Pressure Laminate on MDF	Ravine Natural Oak	
Aluminium Composite Panel Wall Cladding	Alucobond	Alucobond Plus	Spectra Ocean 914	
Laminate Wall Cladding	Laminex	Innovations	Copper Cross Roads, Metallic Finish, 511	
Laminate Wall Cladding	Laminex	Innovations	Plex Copper, 090	
Laminate Wall Cladding	Polytec	Laminate	Tessuto Milan, Matt	
Wall Paper	Baresque	Optic Vinyl Wall Paper	Studio Suite 01B96	
<b>WALL PROTECTION GENERALLY</b>				
Wall Cladding (Blue)	Altro	Whiterock Chameleon	Nightfall	
Wall Cladding (Taupe)	Altro	Whiterock Satin	Fawn	
Wall Cladding (White)	Altro	Whiterock Satin	White	
Wall Panelling	CS Group	Acrovyn Wall covering .060 Rigid Sheet 1.2 metres x 3.0 metres	Eggshell (100)	
Wall lining Lift Lobby	Gerflor	Decotrend 2mm Impact wall lining	Alu Brosse 0050	

## CORNER GUARDS, HANDRAILS, CRASH RAILS AND DOOR PROTECTION SCHEDULE

WALL PROTECTION				
LOCATION	BRAND	DESCRIPTION	COLOUR	IMAGE
Surface Mounted Corner Guard	Construction Specialities	Surface Mounted 304 Stainless Steel Corner Guard to 1200mm high	Stainless Steel	
Crash Rail		Timber crash rail 150mm high to match existing	Timber sealed with clear gloss polyurethane sealant	
Handrail (Corridors)	CS Group	Timber with Stainless Steel Bracket HRWS-6C handrail	Timber & SS Handrail	
Door Protection	CS Group	Acrovyn Door Cladding	Pumice 858	
Notice board	Laminex	Compact Laminate	New Graphite	
Wall protection around hand basins	Altro	Whiterock Satin	White	
Previously used selections				
Surface Mounted Corner Guard	CS Group	Acrovyn SM Series Corner Guard 1200mm high	Eggshell (100) Danube (223) Mushroom (305) Buttercream (519) Celery (311) Cape Blue (325) White	
Crash Rail	CS Group	Acrovyn Crash Rail SCR 48 Surface mounted bumper rail Mounted @ 1000mm high	Eggshell (100)	
Handrail (Corridors)	CS Group	Acrovyn HR-6CN	Eggshell (100)	
Door Protection		2mm stainless Steel sheet to 1200h		
Door Protection	Altro	Whiterock Satin TO 1200h	White	

### 5.1.11 Ceiling Finishes

Generally in offices and corridors Acoustic tiles with antimicrobial properties can be used. Where infection control is important, such as clinical areas, 13mm Plasterboard ceilings should be specified. Moisture Resistant plasterboard must be used in wet areas.

#### CEILING FINISHES SCHEDULE

CEILING FINISHES			
DESCRIPTION	SUPPLIER	PRODUCT	COLOUR / FINISH
Plasterboard/Villaboard Flush Set Ceilings Generally		13mm Plasterboard with Paint Finish Washable Low Sheen Acrylic (Mouldshield product for wet areas)	Dulux 'Ceiling White'
Acoustic Tile	Armstrong	Armstrong 19mm BioGuard 600 x 600 Acoustic ceiling tile on Peakform 24mm ceiling suspension system.	Square Lay-in
Acoustic Tile	Armstrong	Armstrong 19mm BioGuard 1200 x 600 Acoustic ceiling tile on Peakform 24mm ceiling suspension system.	Square Lay-in
Shadowline wall angle	Rondo	Aluminium Shadowline Wall Angle AL009	

# 6 External Finishes

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## 6.1 External Finishes

### 6.1.1 Material Choice



External finishes at RDH are selected for robustness and longevity due to high duration of sun hours, exposure to salt air due to proximity to the ocean and high wind weather situations. The external material elements need have sufficient structural support to withstand cyclonic wind and rain treatment and simultaneously be cohesive with the way finding techniques and themes for the campus.


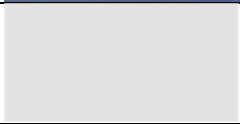

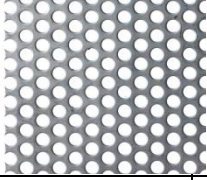








## 6.1.2 Current Selections

The following is a list of materials used for recent works at RDH based on area by area.


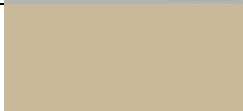
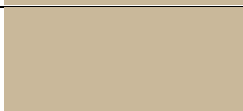
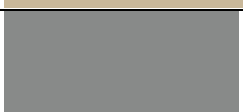


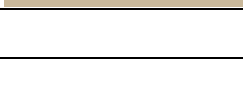


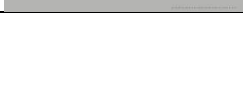
### EXTERNAL FINISHES SCHEDULE



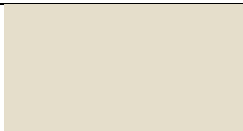
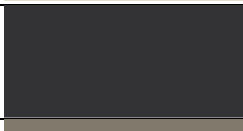


EXTERNAL FINISHES				
LOCATION	BRAND	PRODUCT	FINISH, COLOUR	IMAGE
<b>OUTPATIENTS- PRE ADMISSIONS-EYE CLINIC AREA</b>				
General roofing throughout	Lysaght	Trimdek	Colorbond Surfmist	
General flashings and cappings	Colorbond		Colorbond Surfmist	
Fibre Cement Cladding	James Hardie	Comtex or equal approved	Texture Coat finish, refer below	
Sheet Metal	Lysaght	CustomOrb	Colorbond, Classic Cream	
Fibre Cement Cladding	Dulux or equal approved	Acratex Texture Coat Finish	Colour to match existing concrete sills adjacent,	
Fibre Cement Cladding under eaves	Dulux or equal approved	Weathershield, low sheen acrylic	Colour to match existing eaves	
Structural Steel Sunshade structure and fencing posts	Dulux or equal approved	Weathershield, low sheen acrylic	To match Colorbond, Deep Ocean	
Aluminium Louvres New roof extension	Locker Group	Hi-Light Industries, Sentinel Swaged Louvre	Colorbond, Deep Ocean	
Aluminium Horizontal Slats Surrounding plant		Colorbond, Deep Ocean		

EXTERNAL FINISHES CONTINUED				
LOCATION	BRAND	PRODUCT	FINISH, COLOUR	IMAGE
<b>MAIN ENTRY</b>				
Roof Feature Cladding	Alucobond	Alucobond PLUS	Spectra Ocean	
Metal Deck	Lysaght	Trimdeck	Colorbond, Surfmist	
Steel Mesh	Locker Group	Perforated metal Eclipse 600 (R06440)	Interpon, D2015 Ultriva, Copper Penny Matt YY22AA	
				
External Blockwork walls	Dulux	Refer to painting specification	Timeless Grey PG1F4	
Fibre Cement Cladding	Dulux	Refer to painting specification	Timeless Grey PG1F4	
Structural Steel	Dulux	Refer to painting specification	Colorbond Monument C29	
<b>COVERED ACCESSIBLE CARPARK</b>				
Steel work UB Portal CH Struts	Dulux	Painted, two pack gloss for off-site application	Dulux Weathermax HBR to match colorbond Shale Grey	
Soffit Cladding	Colorbond	Custom Orb	Shale Grey	
Downpipes		To match steelwork		
Concrete Pavement		Standard grey concrete with broom finish	Any applied or insitu finishes to be confirmed by the superintendent	
Laser Cut Panels	Dulux	Powdercoat	Duratec Intensity Coast Code: 9005233S	
Separation Blades	Dulux	Powdercoat	Duralloy Olde Pewter Satin Code: 50243	

EXTERNAL FINISHES CONTINUED				
LOCATION	BRAND	PRODUCT	FINISH, COLOUR	IMAGE
<b>KIOSK ROOF</b>				
Steel work UB Portal CH Struts		Painted, two pack gloss for off-site application	Dulux Weathermax HBR to match colorbond Shale Grey	
Soffit Cladding	Colorbond	Custom Orb	Shale Grey	
Concrete Pavement		Standard grey concrete with broom finish	Any applied or insitu finishes to be confirmed by the superintendent	
Laser Cut Panels	Dulux	Powdercoat	Duratec Intensity Coast Code: 9005233S	
Separation Blades	Dulux	Powdercoat	Duralloy Olde Pewter Satin Code: 50243	
<b>COVERED WALKWAY</b>				
Steel Work		Painted two pack gloss	Dulux Weathermax HBR Match Colorbond Monument	
Soffit Cladding		Painted	Shale Grey	
Concrete Pavement		Standard Grey concrete with broom finish		
<b>MAIN WALKWAY EXTENSION</b>				
Steelwork		Painted two pack gloss	Dulux Weathermax HBR Match Colorbond Monument	
Lasercut Panels	Dulux	Powdercoat	Duratec Intensity Coast Code: 9005233S	
Separation Blades	Dulux	Powdercoat	Duralloy Olde Pewter Satin Code: 50243	



EXTERNAL FINISHES CONTINUED				
LOCATION	BRAND	PRODUCT	FINISH, COLOUR	IMAGE
<b>KIOSK ROOF EXTENSION &amp; OUTDOOR SEATING</b>				
Steelwork		Painted two pack gloss	Dulux Weathermax HBR to match Colorbond Shale Grey	
Wall Cladding		Paint Low Sheen finish	To match Colorbond Paper Bark	
Wall Cladding	Colorbond	Custom orb	Paper Bark (to match existing)	
Rendered blockwork wall	Dulux	Acra Tex 955 AcraShield	Timeless Grey PN2A4	
Rubbish Enclosure Slatted Screen & Gates	Dulux	Powdercoat	Precious Pewter Satin code 2603135S	
Kiosk Back of House Slatted Screen Gates	Dulux	Powdercoat	Duralloy Paper Bark Satin code: 2603135S	
Auto Door		Anodised	Natural Clear Anodised	
Handrail Assembly		Stainless Steel grade 316		
Metal Screens Lasercut	Dulux	Powdercoat	Duratec Intensity Coast Code: 9005233S	
Play area fence	Duux	Powdercoat	Duralloy Shale Grey Satin code: 83246	

EXTERNAL FINISHES CONTINUED				
LOCATION	BRAND	PRODUCT	FINISH, COLOUR	IMAGE
<b>EMERGENCY DEPARTMENT WAITING AREA</b>				
Fascia & soffit flashings		Pre finished	Shale Grey	
Eaves / Soffit lining	Custom Orb	Pre finished	Shale Grey	
External Concrete Blockwork Walls B	Dulux	Painted Cement Render	Paraburdoo RB4	
External Concrete Blockwork Walls C	Dulux	Painted Cement Render	Ecru Half strength S15D1H	
External Exposed Steel Structure		Powdercoated	Colourbond Monument	
Steel Door Frames	Dulux	Semi Gloss Enamel	Rogue S15A5	
Metal Faced Doors – External face	Dulux	Powdercoated to match	Ecru Half Strength S15D1H	

# 7 Doors & Window Hardware

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## 7.1 Door & Window Hardware

### 7.1.1 Selection Schedules

Door Hardware generally is to be selected from the Lockwood or Kaba range.

**Cylinders are to be Assa Abloy only throughout Royal Darwin Hospital.**

The table below indicates the selections for the most recent upgrades to the hospital

DOOR HARDWARE					
SUPPLIER	DESCRIPTION	CODE	BRAND	FINISH	IMAGE
<b>HINGES</b>					
Assa Abloy	Hinges: 100 x 100 x 2.5 Ball Bearing	LW10000BBSSS	Lockwood	SSS	
Dorma Kaba	Hinges: 100 x 100 x 2.5	KH100/100BBSSS	Kaba	SSS	
Assa Abloy	Hinges: 100 x 75 x 2.5 Ball Bearing	LW10075BBSSS	Lockwood	SSS	
Dorma Kaba	Hinges: 100 x 75 x 2.5	KH100/75BBSSS	Kaba	SSS	
Assa Abloy	Heavy Duty Aluminium Interfold Hinge	A104F	McCallum	SNA	
<b>LOCKS</b>					
Dorma Kaba	MS Storeroom lock SSS	MS80SSS	Kaba	SSS	
Assa Abloy	Key Entry Escape Lock	3772X-SS	Lockwood		
Assa Abloy	Electronic Magnetic Lock 12/24vDC Double Monitored	EMZ8-DM	Lockwood	-	
Assa Abloy	Mag Lock Bracket L&Z Adjustable	EMZ8B-DLZA	Lockwood	-	
Dorma Kaba	Electronic Magnetic Lock 540KG, surface mounted	KML-10	Kaba	-	
Dorma Kaba	L & Z Bracket for KML-6/KML-10 Series	B1002	Kaba	-	
Assa Abloy	Electric Strike 12/30vDC Multifunction Door Monitored	ES2100	Lockwood	-	
Assa Abloy	Temp Cylinder	570TEMP	Lockwood		
Assa Abloy	Room Guard Locking Kit For WC with multiple doors	3570 HRGKIT	Lockwood	SC	

DOOR HARDWARE					
SUPPLIER	DESCRIPTION	CODE	BRAND	FINISH	IMAGE
<b>PUSH/PULL PLATES &amp; HANDLES</b>					
Assa Abloy	214 Exterior Plate	21407NNSS	Lockwood	SS	
Assa Abloy	215 Interior Plate & P2 Pull Handle	21524NN/P2SS	Lockwood	SS	
Dorma Kaba	Push Plate 300 x 100 C/F	PP300C	Kaba	SSS	
Dorma Kaba	Pull Handle on Plate 300 x 100 V/F	PH300V	Kaba	SSS	
Assa Abloy	Square End Plate with Cylinder Hole & 70 Lever	1801/70SC	Lockwood	SC	
Assa Abloy	Square End Plate with 70 Lever	1905/70SC	Lockwood	SC	
Assa Abloy	200 Exterior Plate with LED & 96 Lever	20022NN/96*SS	Lockwood	SS	
Assa Abloy	201 Interior Plate with LED & 96 Lever	20022NN/96*SS	Lockwood	SS	
<b>DOOR PROTECTION &amp; KICK PLATES</b>					
	Door Width x 1200h x 1.2mm			SSS	
	Door Width x 300h x 1.2mm			SSS	
Altro	Door Width x 1200h x 1.2mm			Whiterock	
Acrovyn and Bioclad are currently being tested as door protection. Stainless Steel door protection can be used, but should be specified to be 316 grade.					
<b>CLOSERS/HOLD OPEN</b>					
Assa Abloy	7726 Series Size 2 – 6 S/Rail Closer Adjustable Backcheck Delayed Action	7726SRDASSS	Lockwood	SSS	
Assa Abloy	Cam action closer with delayed action	2616DASSS	Lockwood	SSS	
Dorma Kaba	Door Closer	CA25SIL-B	Kaba	Silver	
<b>EDGE PROTECTION</b>					
CS	Door Edge Protection		Acrovyn		
<b>DOOR STOPS</b>					
Assa Abloy	Wall Mounted Door Stop 75mm x 19mm TP	A300SS	Lockwood	SS	
Assa Abloy	Floor Mounted Door Stop TP	A250SC	Lockwood	SC	
Dorma Kaba	Door Stop	DS110SCP	Kaba	SCP	
<b>DOOR BOLTS</b>					
Dorma Kaba	Roller Bolt	RB111SCP	Kaba	SS	
<b>DOOR SEALS</b>					
Raven	RP78Hsi Double Door Set Size to door height	A78HSICDSCA	Raven	CA	
Raven	RP99Si Door Bottom Size to door width	A99SIC36CA	Raven	CA	
Raven	RP71 Astragal	A71C2250CA	Raven	CA	
Raven	RP116 Threshold CA Size to door width	A116C1000CA	Raven	CA	

# 8 Sanitary Fixtures

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## 8.1 Sanitary Selections

### 8.1.1 Selection Requirements



Sanitaryware selections need to keep in line with the hospitals previously selected fixtures for ease of maintenance. Some fixtures have been tried and tested and have proven to reduce maintenance issues and be of quality, and fit for their use.

### 8.1.2 Toilet Suites

Throughout the hospital there are a number of different toilet suites used for different purposes. There is a standard flushometer used throughout the hospital, and all toilet suite selections must be compatible with the flushometer.

#### TOILET SUITE SELECTIONS

TOILET SUITES			
LOCATION	SUPPLIER	DESCRIPTION	IMAGE
Preferred Toilet Suite Generally	Caroma	Metro Invisi Series II Wall Faced Suite With Metro Soft Close Seat Code: 716100W	
Alternative Toilet Suite where concrete floor beams restrict trap location			
Preferred Flush Plate & Buttons Generally	Caroma	Invisi Series II Oval Dual Flush Button Panel Pack – Satin Code: 237078S	
Accessible and Ambulant Toilet Suite	Caroma	<u>Accessible</u> Care 800 Invisi II Wall Faced Suite With Backrest – Colani Single Flap – Sorrento Blue Code: 718210BSB <u>Ambulant</u> Leda Invisi Series II Wall Faced SC Suite <u>No Backrest</u> – Colani Single Flap – White. Code: 718210BW	
Disabled Toilet seat where 30% illuminance contrast is required	Caroma	Single Flap or double flap Colani or Caravelle Care to match toilet suite selection. Colours – Sorrento Blue or Anthracite Grey	







TOILET SUITES			
LOCATION	SUPPLIER	DESCRIPTION	IMAGE
Accessible Flush Plate & Buttons	Caroma	Invisi Series II Care Dual Flush Plate And Raised Buttons – Satin Code: 237011S	
Wall Hung Urinal	Caroma	Leda Electronic Urinal Code: 678661, 678235w	



### 8.1.3 Hand Basins

Hand basin selections have both wall mounted and basin mounted taps and this should be considered when selecting the correct basin code to be specified. Hand basins are to be located close to the exit door of the room so people can wash hands upon exiting / entering the room. Wall protection sheets are to be centred over the hand basin. For install

#### HAND BASIN SELECTIONS

HAND BASINS			
LOCATION	SUPPLIER	DESCRIPTION	IMAGE
Wall Hung Basin with chrome bottle trap for Clinical areas	Caroma	Medical Basin No tap hole Code: 814541W DN38 Chrome Plated Bottle Trap and 1511 bolt on pin bracket (811236)	
Wall Hung Basin With chrome bottle trap generally for patient bathrooms, staff amenities and public toilet	Caroma	Care 600 Wall Basin No Tap Hole Code: 873100W DN38 Chrome Plated Bottle Trap	
Wall Hung Basin With chrome bottle trap Generally for patient bathrooms, staff amenities and public toilet	Caroma	Opal 510 Wall Basin Confirm Tap Hole Code: 632610W DN38 Chrome Plated Bottle Trap	
Accessible Wall Hung Basin with Integrated Left Hand Shelf With chrome bottle trap	Caroma	Opal 720 Left Hand Shelf Wall Basin Confirm Tap Hole DN38 Chrome Plated Bottle Trap	
Accessible Wall Hung Basin with Integrated Right Hand Shelf With chrome bottle trap	Caroma	Opal 720 Right Hand Shelf Wall Basin Confirm Tap Hole DN38 Chrome Plated Bottle Trap	
Wall Hung Basin With chrome bottle trap for confined spaces where a small basin is required	Caroma	Fawn 450 Wall Basin Confirm Tap Hole Code: 640210W DN38 Chrome Plated Bottle Trap	

### 8.1.4 Sinks

Sink selections need to reflect the Health Design Guidelines for medical specific sink dimensions along with accessories such as plaster traps dependant on room requirements.

Kitchen sinks are usually single bowl and single drainer with accessories such as cold water filter taps with an under bench unit.

#### SINK SCHEDULE

SINKS			
LOCATION	SUPPLIER	DESCRIPTION	IMAGE
Stainless Steel Sink with Left Hand Drainer	Clarke	Advance Single End Bowl 1 Tap Hole Code: 1503.L	
Purpose made fully integrated stainless steel sink for Dirty Utility rooms etc.	Britex	450mmL x 350mmW x 250mmD Integrated into stainless steel bench refer to joinery details	
Surgical trough	Britex	Wall mounted SS surgical scrub trough. Length as required. Tap holes as required.	
Cleaners Sink	Britex	Floor Mounted Stainless Steel cleaners sink with stainless steel hinged grate.	
Sluice Sink	Britex	Grade 304/316 Stainless Steel Flushing Sink Integrated into stainless steel bench refer to joinery details	

### 8.1.5 Tapware

All tapware to be fitted to wall (excludes accessible fixtures) with the bottom of spout outlet to be 200mm above basin rim.

Spout to be fitted with stream straightener nozzle, NOT aerating nozzle.

Spout to be fitted with 8litre/minute flow limiter.

Spout to discharge clear of basin outlet, towards front of basin. This may require the provision of a non-standard length spout



#### TAPWARE SELECTIONS

TAPWARE			
LOCATION	SUPPLIER	DESCRIPTION	IMAGE
Wall mounted Sensor tap for clinical hand wash basins generally	Enware	Sensor tap [sensor activated] with 230mm Angle Spout [NSP5313 with 2 minute run-time setting & 6 star rating]. Enware Aquablend ATM s710R TMV in recessed stainless steel wall box complete with lockable door to suit or equal approved.	
Wall Mounted Lever Tapware for general patient hand wash basins, laundry and dirty utility room sinks	Enware	"Leva" 150 Lever type 56 wall mounted mixing set (jumper valve) with horizontal spout. Code: LJV150420 Button colour: yellow & blue	
Lever Mixer Tap Accessible Basin mixer	Caroma	Nordic Care Basin Mixer (Warm/Cold) Code: 90964C5A With Nordic Top Plate Satin Grey Cold/Warm Indicators Code: 90935	
Basin Mixer for staff amenities and general public toilets	Caroma	Nordic Basin Mixer Code: 90947C5A With Nordic Top Plate Satin Grey Cold/Warm Indicators Code: 90935	
Sink Mixer for staff Kitchen sinks, Beverage bays, education rooms etc	Caroma	Nordic Sink Mixer (240mm) Code: 90946C4A With Nordic Top Plate Satin Grey Cold/Warm Indicators Code: 90935	
Toilet Cistern Tap Generally	Enware	CS Series right angled cistern tap M&F 15mm Code: CS303 Button colour: Blue	
Washing Machine Taps	Enware	Leva 80mm Lever washing machine taps with button colours red and blue	
Cleaners sink tapset	Enware	Leva 80mm recessed wall set with SPC110 swivel aerated spout jumper val ve. LJV80315	

### 8.1.6 Showers

Shower selections depend on location such as patient areas and staff areas.







#### SHOWER SELECTIONS

SHOWER FIXTURES			
LOCATION	SUPPLIER	DESCRIPTION	IMAGE
Hand held shower and tap set for accessible showers and patient showers	Enware	“Leva” 150 recess set with SGR023C chrome hand held shower & 1.5m hose with 900mm ss grabrail and shower head holder [WELS5 Star – 5.6lpm water efficiency rating] Code: LJV150364 Button Colour: Yellow & Blue	
Staff amenities shower rose and lever mixers	Enware	Leva 80mm recessed wall set with SP262 deluxe shower rose	

### 8.1.7 Miscellaneous fixtures

Clinical and patient areas often require specific fixtures under the Health Design Guidelines. Below are an example of recently used fixtures for renovation projects.

#### MISCELLANEOUS SELECTIONS

MISCELLANEOUS			
LOCATION	SUPPLIER	DESCRIPTION	IMAGE
Mixing Valve and Cabinet	Galvin Engineering	CliniMix® Cabinet Assembly With Hinged Door 20mm Bottom In & Out. # WM-CABR021	
Chilled/Boiling Water Tap	Zip	HydroTap Boiling, Chilled and Filtered Tap Code: HT1703 RDH to provide feedback for the following: Under bench unit to be provided in a self-contained locked cupboard.	
Wall mounted Hot water dispenser	Billi	Size depends on the number of persons using the kitchen area – typically 5L capacity	
Wall mounted Hot water dispenser	Zip	Hydroboil Size depends on the number of persons using the kitchen area – typically 5L capacity	
Trigger Spray arm with wall bracket	Britex	BRITEX Stainless Steel Slop Hopper Trigger Spray with wall bracket	
Flush Valve – throughout	LWG Specialised Plumbing Products	Zurn ZDF-6152XL Mains Pressure Dual Flush Valve for 6 litre back entry pans available from L.W.Gemmell. ZDF-6152XL	

# 9 Joinery

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## 9.1 . Joinery Selections

### 9.1.1 Joinery counters and station areas

Outpatient Reception Joinery

Combination of solid surface and timber laminate finishes.

Reception counter areas include;

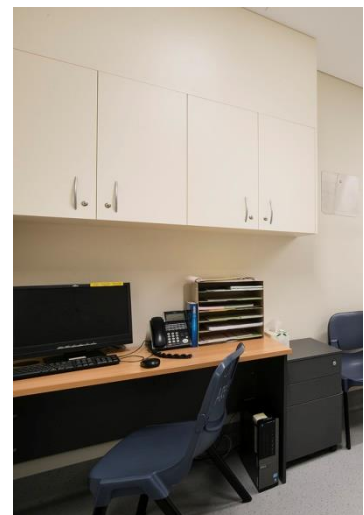
- Vertical Folder slots
- Lockable cupboards
- Horizontal Pidgeon holes
- Printer and cable tidy holes
- In some cases anti- jump barriers have been installed
- in some counter areas.



### 9.1.2 Joinery work stations

Generally consultations room joinery consists of fixed lockable overhead cupboards with either a fixed work station or no work station below to allow for a free standing work station. The bulk head above the cupboards is also part of the joinery unit and is often either a flush finish or shadow line profile.

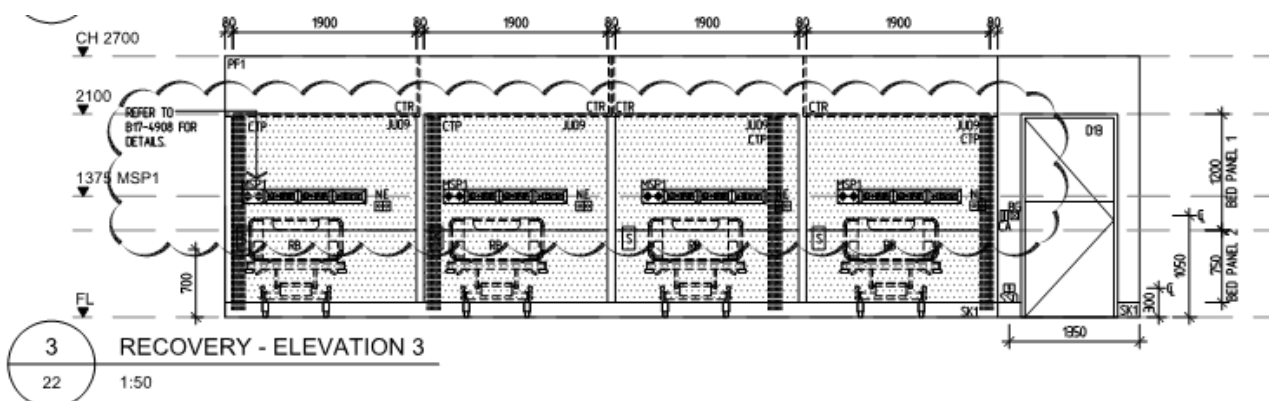
Workstations are typically 750mm high to the work top and 650 deep minimum although 700mm deep is preferred. The cupboards can conform to the neutral Laminex selection or one of the approved feature colours for the project. Additional height needs to be allowed for with the introduction of sit to stand work stations to avoid desk top items clashing with the fixed overhead cupboards.



(For loose work stations please refer to furniture section)

### 9.1.3 Bed Panel Joinery

Joinery bed panels should be standardised for each ward or clinical area. The medical services panel make up is specific for each department so that each bed panel is identical for ease of use for staff in that area. The joinery will vary depending on the location for example the recovery areas will have a services panel and a plain bed head panel and other areas will have a combination of shelf and or cupboards. Each bed panel will need to incorporate a range of the following; glove dispensers, emesis bag dispensers, sharps disposal container, single or multiple monitors, medical services panel, switches, alarm and monitoring, slotted panel for consumables etc. The image below shows they layout of a bed head panel in the CT scanner unit. The bed head is very minimal as patients will not stay in this area for extended periods of time. Wards will generally have a joinery unit that the patient can lock their belongings in for security.



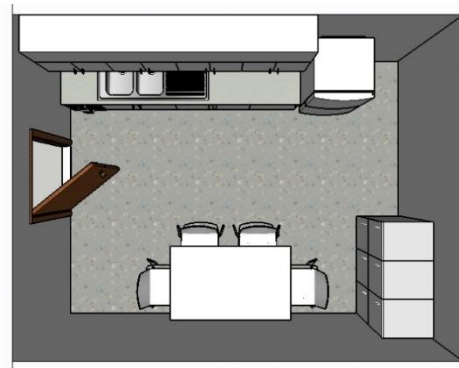
### 9.1.4 Kitchen joinery

Typical base carcass 600mm deep 900mm high (including benchtop)

- 1x bank of drawers with cutlery insert in top drawer
- 1x Double door cupboard with no shelf (under sink)
- 1x double door cupboard with adjustable shelf
- Overhead cupboard casework 600high x 350deep 600mm above benchtop
- Joinery Bulkhead to ceiling above
- Note: overall width of joinery dependant on room size



The diagram on the right shows a typical Plan layout of kitchenette with loose furniture & fridge. All utilities to be integrated into the joinery unit.





### 9.1.5 Bathroom Vanity Joinery

Bathroom joinery is to be post formed antimicrobial laminate on moisture resistant substrate. Joins are to be minimised to reduce harbouring of dirt and infection. Refer to RDH for infection control policies and procedures.

### 9.1.6 Washroom Partition Systems

When replacing joinery like for like throughout hospital, use moisture resistant Laminate finishes. Generally partition systems are preferable with front of partition to go to floor with toilet dividers to be off the ground. Horizontal partition joint lines are not preferable as they can harbour dirt and infection.

### 9.1.7 Materials & Fixtures

Joinery Laminate Doors, End panels, Drawers, Overhead cupboards to have moisture resistant MDF board. General doors can be melamine pre finished board with matching 1mm ABS edge stripping.

- Benchtop laminate to be on Moisture Resistant MDF substrate.
- ABS high impact 1mm edge stripping to all joinery door and panel edging
- Post formed edge radius to be maximum 10mm.
- Laminate finish to continue to the underside of the overhang to benchtop.
- Benchtop laminate to wrap under and scribe in line with doors.
- Underside of MDF benchtop to have melamine finish
- All surfaces to incorporate an Antimicrobial and antifungal properties such as Laminex Protect+. Refer to manufacturer's technical information to find out what colour range is available.

JOINERY				
LOCATION	BRAND	DESCRIPTION	COLOUR	IMAGE
<b>Generally</b>				
Laminate Doors, Drawers, End Panels, Kickers overhead cupboards	Laminex	Melamine 16mm pre finished MR MDF with matching ABS edge strip	White 200 Natural Finish	
Staff station and reception counters	Staron	Corian Bright White BW010		
Benchtop	Laminex	Laminated MR MDF 32mm thick with post formed front edge. Post form to wrap to underside. No exposed MDF	Zincworks Natural Finish	
Splashback	Laminex	Melamine 16mm pre finished MR MDF with matching ABS edge strip	Zincworks Natural Finish	
Toilet Partitions	Laminex	13mm Multipurpose Compact Laminate	New Graphite, Natural Finish	
Toilet Partition Doors	Laminex	13mm Multipurpose Compact Laminate	Zincworks	
Patient Bedheads	Laminex	Laminate	Silky Maple Natural Finish	
<b>Feature Colours</b>				
Toilet Partition Doors	Laminex	13mm Multipurpose Compact Laminate	Juicy	
Feature joinery front panel	Laminex	Laminate	Energy Stream Natural Finish	

# 10 Furniture & Fittings

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## 10.1 Fittings

### 10.1.1 Fittings



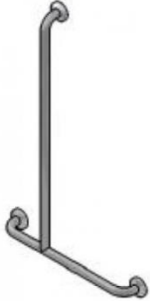

Fixtures fittings and furniture to be replaced with equivalent from the schedules below when required.

All soap dispensers, paper towel dispensers, glove dispensers, sharps containers, and alcohol rub dispensers are to be supplied by the hospital




#### BATHROOM FITTINGS

BATHROOM FITTINGS				
ITEM	SUPPLIER	DESCRIPTION	COLOUR	IMAGE
Alcohol Rub Dispenser	Supplied by RDH	Wall Mounted		
Waste Bin	Supplied by RDH			
Soap Dispenser	Supplied by RDH	Wall Mounted		
Paper Towel Dispenser	Supplied by RDH	Wall Mounted		
Antiseptic Soap Dispenser	Supplied by RDH	Wall Mounted		
Glove Dispenser	Supplied by RDH	Wall Mounted		
Sharps Container	Supplied by RDH	Wall mounted		
Toilet Roll Holder	Harvey Distributors or Approved Equivalent	Tork Double Conventional Toilet Roll Dispenser	White	
Coat Hooks	Caroma or Approved Equivalent	Cosmo Robe Hook	Chrome	
450x450mm Ambulant Grab Rail	Bradley Australia or Approved Equivalent	832-006-AMB	Satin Stainless Steel	
90 ° Grab Rails	Bradley Australia or Approved Equivalent	In Wall Cistern 90° grab rail. Grab rails to be 32mm Ø with concealed fixings and cover roses all in grade 304 satin finished stainless steel.	Satin Stainless Steel	



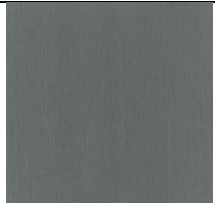
## BATHROOM FITTINGS CONTINUED

ITEM	SUPPLIER	DESCRIPTION	COLOUR	IMAGE
Grab Rail	Bradley Australia or approved equivalent	Model 812 – 32mm Ø with concealed fixings and cover roses all in grade 304 satin finished stainless steel.		
Drop down grab bar	Bradley Australia	Drop down grab bar rail 832-102 with locking pin. 32mm Ø with concealed fixings and cover roses all in grade 304 satin finished stainless steel.		
Shower grabrail to AS1428.1	Bradley Australia	Model 832-1430LH/1431RH /1432– 1100x600mm. 32mm Ø with concealed fixings and cover roses all in grade 304 satin finished stainless steel.		
Mirror generally		6mm thick Silver Mirror Set into Clear Anodised Aluminum Frame to all sides	600x1200mm	
Mirror to accessible hand basins				
Baby Change	Bradley Australia or Approved Equivalent	Infant Care Nappy Nook Baby Changing Station- Vertical	Ivory	

**GENERAL FITTINGS**

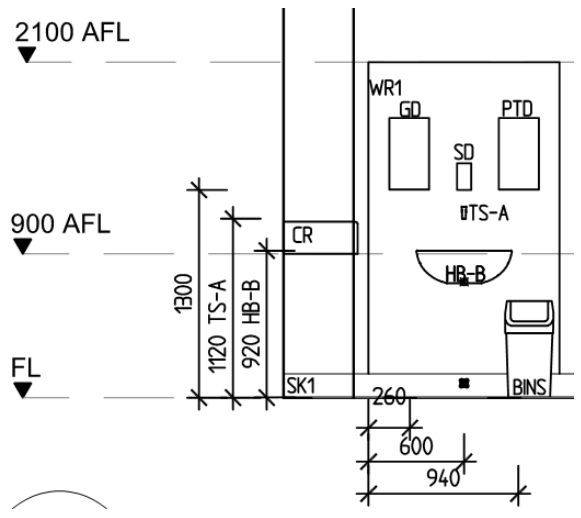
GENERAL FITTINGS				
ITEM	SUPPLIER	DESCRIPTION	COLOUR	IMAGE
Whiteboard (pin boards are not)	Wilson & Gilkes PTY (02) 9914 0900 or Approved Equivalent	Magnetic Whiteboard with Clear Anodised Trim	White	
Block out Roller Blinds	Vertilux or Approved Equivalent	Fully Enclosed Kasset System. 80mm Clutch with 50mm Side Channel and 35mm Bottom Rail. Block-out Fabric	Fabric: Darkening, Colour: Clutch: e Base Rail: Chain: Stainless Steel	
Sheer Roller Blinds	Vertilux or Approved Equivalent	Single Kasset System.	Fabric Colour: Clutch: Base Rail: Silver Chain: Stainless Steel	
Utensil Washer	Miele Professional	Under bench washer-disinfector G7862 UT	Stainless Steel	
Full Dome Mirror	Bronson Safety or Approved Equivalent	Crystal View Full Dome Mirror 450mm	Code: A1683 (also available in half and ¼ as required.)	
Wall Mounted TV Brackets	ATDEC (02 87295050)	Wall Mounted Brackets and 32inch TV.	TH2250-VTP	

## GENERAL FITTINGS CONTINUED

ITEM	SUPPLIER	DESCRIPTION	COLOUR	IMAGE
Ceiling Mounted TV Brackets	ATDEC	Pivotelli TLP-Triple Limpet Bracket, Ceiling Mounted. Note: Structural engineer to sign off on fixing details.	Bracket TH1040 CTS	
Curtain Rail	Metlam	ML-SCT Series Bed Curtain Track System Heavy Duty, Ceiling Suspended Curtain Track	Anodised Aluminum	
Notice Board	Laminex	Compact Laminate	New Graphite	

### 10.1.2 Typical hand basin elevation and set out

The diagram below shows a typical hand wash basin set up. Generally there is wall protection full height to reduce damage to the wall from the bin and other fittings as well as ease of cleaning and hygiene. The layout generally includes; a paper towel dispenser, soap dispenser, glove dispenser, and hand basin with wall mounted taps.



## 10.2 Furniture

### 10.2.1 Furniture Selections – Staff Areas

Furniture selections should continue the design themes of each department. Chairs should follow previously selected models which have been approved. Loose work stations should also follow previously selected systems. The work station fabric is to be consistent with the colour themes.



### 10.2.2 Furniture Selections - Public Areas

Public area furniture selections need to consider; material selection able to withstand high use of patrons, be robust, have a microbial properties and be consistent with the design themes of the department where it will be located. Furniture selections need to consider ease of relocation for cleaning below and around the furniture and also consider whether the surface will mark or scratch the floor finish.





**EXISTING LOOSE FURNITURE**

<b>LOOSE FURNITURE</b>				
<b>ITEM</b>	<b>SUPPLIER</b>	<b>DESCRIPTION</b>	<b>COLOUR</b>	<b>IMAGE</b>