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## Medical Design Systems /Overview

Medical Design Systems is a supplier of unique plumbing fixtures and workstations for Health Care facilities. We have some standard products and components, but our strength is being able to provide customised systems to fulfill your particular requirements.

Our mission is to provide innovative and superior quality products to address the unique needs of the health care community in addressing the issues of infectious control.



By using our manufacturing and technical expertise in collaboration with architects and health care professionals, better solutions can be implemented than the mass produced products available in the marketplace.

Our products are centered on the use of solid surface as the primary raw material. Solid surface such as Dupont Corian, and our own Pearlstone, have basic intrinsic qualities that are ideally suited to address the issues of infectious control. They are nonporous, so they will not stain nor support the growth of bacteria. They are resistant to chemicals and are easy to clean, making them ideal in the hospital environment. What is generally overlooked by the majority of people is their inherent strength, durability, and unique manufacturing attributes. It is the only material where one can fuse multiple pieces together to create a single monolithic item without crevices or visible seams – an item with no place for dirt or bacteria to accumulate and that is easy to clean. As professional engineers, we use this capability and the inherent strength of the material to design products that are structurally strong without the need of any other substructure.

The elimination of this substructure, usually made of wood, results in a price competitive product made entirely of solid surface. Unlike a wooden product, the solid surface one will last for decades and provide a far better return on investment.

From an aesthetic perspective, solid surface solutions give more freedom to architects to create unique designs. Because we can thermoform or cast solid surface into curved shapes and still combine these with flat stock to produce a monolithic product, the design options become limitless. Our ability to infuse artwork or graphics into the material, provides another degree of freedom to create a unique design.





## IC07DM Infectious Control Hand Wash Sink/01

Our hand wash sink is Z-8000 compliant and is CSA and IAP-MO certified. It is a monolithic cast unit of Pearlstone solid surface. The basic unit has a 3" integrated back splash, and we offer optional upgrades to larger back splashes. Two other options are a solid smooth underside and a rigid plumbing shroud.

Should you require a different design for a project, we can work with you to cast a unique sink.



## Play Table

A large 10ft x 12ft organic shaped "pond" table provides a focal activity centre in the common area of the facility. Being fully encapsulated in 12mm corian, the table is durable, totally stain proof, will not support the growth of any bacteria, and will continue to look new for several decades.



## Examination Room

A 6ft x 8ft wall section was clad with corian infused with this graphic.



## Reception Desk

Graphics were incorporated into the reception desk to add to the "play room" atmosphere of the area.

## Patient Room Vanities/02

We have 3 different styles of bowls: rectangular, oval and round. Each can be incorporated into any deck design for a patient room vanity. All are CSA and IAPMO approved. All have offset drains to meet infectious control requirements and can be used in vanities to comply with ADA requirements. In addition, we can produce custom bowls as per your design for projects. See Humber River Hospital Mental Ward vanity below for an example.





## Shower Systems/03

We build shower systems to order for all projects. The attributes of our bases are:

One piece construction with no crevices.

All inside corners covered for easy cleaning

Rigid wall panels, optional ceiling panel

Non slip shower basin

Sizes and access available to meet ADA requirements

All configurations available – corner, niche, etc.





## St. Joseph's Hospital /03

St. Joseph's hospital did a renovation of their pediatrics facility in the fall of 2015, and RJW Enterprises worked with a graphics art designer to provide some "children's art" into the environment. The artwork is infused into the corian panels, providing durable, non-removable images.

## Nursing Stations/04

All nursing stations, lab workstations, etc, are built to order. The general attributes of our workstations are:

- All solid surface construction – no wooden substructure.
- Drawers are made of solid surface.
- All inside corners covered for easy cleaning
- Curved corners to eliminate damage from hallway traffic
- Integrated cable chases
- Optional integration of image infused artwork/graphics







## Humber River Hospital /01

RJW Enterprises supplied all the custom vanities for the new hospital in Toronto. With an emphasis on infectious control, all the vanities were monolithic construction without any seams and had coved back splashes.

### Hand Wash Stations

44 of these units were used throughout the facility to house bottles of disinfectant and soap for hand washing. As corian is non porous, these units will never deteriorate from becoming wet in this environment.



### Furniture tops and Window Sills

All the window sills in the facility were clad in corian to eliminate any possibility of deterioration from water moisture. We fabricated and installed over 260 counter tops at nursing stations, staff rooms, reception areas, computer monitoring stations, visitor lounge areas, etc



## Surgeon Scrub Sinks

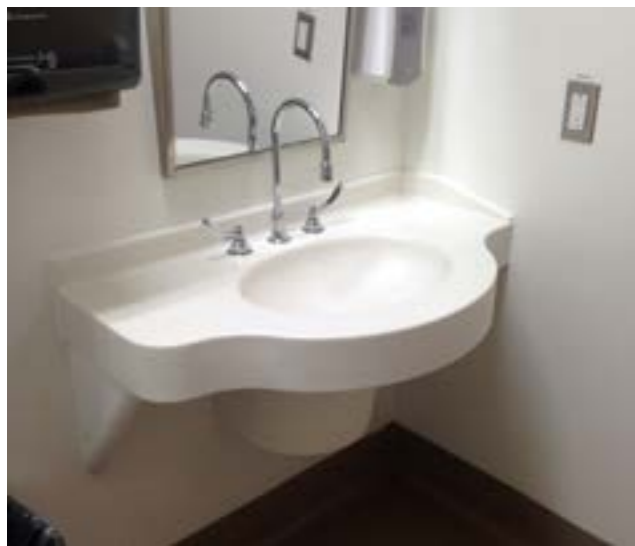
Four oversized custom scrub sinks were developed and installed in January 2012. The drain is offset from the faucet and there are not any flat areas where water can pool.



## Infant Change Tables

46 of these custom tops were installed in the patient rooms of the maternity ward. All the inside corners where the vertical surfaces integrate into the decks are covered to create a monolithic top to eliminate all crevices where bacteria can accumulate. The covered corners ensures easy and complete cleaning of the unit.





## Standard Patient Room

The 674 standard patient rooms used several different vanity configurations using an oval bowl and coved back splashes.



## Bariatric Patient Rooms

These 52 patient rooms were equipped with a highly reinforced vanity top that would withstand a force exceeding 700 lbs.

## Infant Formula Prep

This was a very small custom bowl fabricated in blue corian to make it visibly unique in the 4 nursing stations in the maternity area of the hospital. It was to be used exclusively for formula preparation. With our current Image Infusion Technology, a notice to this effect could be permanently infused into the back splash of the unit.



## Dump Bowl Niche

These 4 large extra deep custom bowls were also installed at the central nursing stations. The niches are lined with corian and the bowls fused to the wall panels and fabricated so that any liquid that splashes on the walls will run into the bowls. This also facilitates easy cleaning of the whole area and eliminates any cracks and crevices for bacteria to accumulate.





## Hand Wash Sink

184 custom hand wash sinks were installed throughout the patient rooms, corridors, and staff areas. As this was prior to the publication of the Z8000 Specifications for Infectious Control Hand Wash Sinks, the design was as per the architects specifications. The overall dimensions are close to those of the Z8000 specs, and this bowl was the template for the development of our IC07DM bowl when Z8000 was published.



## Patient Room Vanities

104 patient room vanities used a custom bowl with an offset drain to address the infection control requirements of preventing water from the faucet running directly into the drain and atomizing bacterial growth in the waste plumbing. We also coved all back splash to deck joints to facilitate easy cleaning and eliminate all cracks where bacteria could grow. This bowl became the basis of our IC07DM bowl for health care facilities.



## Mental Health Ward

RJW Enterprises developed a custom bowl, vanity and plumbing shroud for the 75 patient rooms in the Mental Health ward. The requirement called for a unit that was both strong and secure, without any protrusions or crevices that any cords etc could be attached to. A "hardened" plumbing shroud was developed that could only be removed using special tooling to prevent patient access to the plumbing system.



## Sunnybrook Hospital /02

RJW Enterprises fabricated and installed 680 corian components in a new wing built in 2009/10. The following highlights some of these components:

