



VERIDIA

Product Overview.

A Guide to Apparel & Gowns.

Date Released
September 2020

Industry
Aged Care

Types of Protective Apparel.

Open Back Gown

67296



Eligible for AAMI classification

Full Back Gown

58993



Eligible for AAMI classification

Coveralls

18358

Poncho

24764

Apron

20537



Not Eligible for AAMI classification but suitable for use in general clinical settings.

AAMI Gown Standards.

Graded Gowns are classified by the barrier levels they meet under various tests of Internationally Recognised Standards such as AAMI or AORN and are tested using international tests from ASTM and AATCC as follows:

Level 1 – Some resistance to water spray

Level 2 – Resistant to water spray and some resistance to increasing constant spray pressure.

Type 3 – Resistant to water spray and some resistance to increasing constant spray pressure.

Level 4 – Viral and Blood Resistant (Impervious).

See below for differences in the properties for each Level.

Note: Not all gowns on the market are graded by AAMI standards.

Barrier Performance	Level 1	Level 2	Level 3	Level 4	Test
VERIDIA CODES		67296			
Fluid Resistance [Spray, Water]	4.5 g	1.0g	1.0g	-	AATCC 42
Fluid Resistance [Hydrostatic, Water]	-	20 cm	50 cm	-	AATCC 127
Blood Penetration	-	-	-	No penetration at 2 psi(13.8 kPa)	ASTM F1670
Viral Penetration	-	-	-	No penetration at 2 psi(13.8 kPa)	ASTM F1671

Resources:

Page 33-34 of the [CEC PPE Guide developed by the NSW Government Testing Summary](#) by MUN Global

Non-surgical Gowns.

Non surgical gowns are commonly used for isolation purposes.

Gowns are split into various regions by the risk of receiving splash contact. A gowns' overall classification depends on the lowest test met by the two critical regions - A & B.

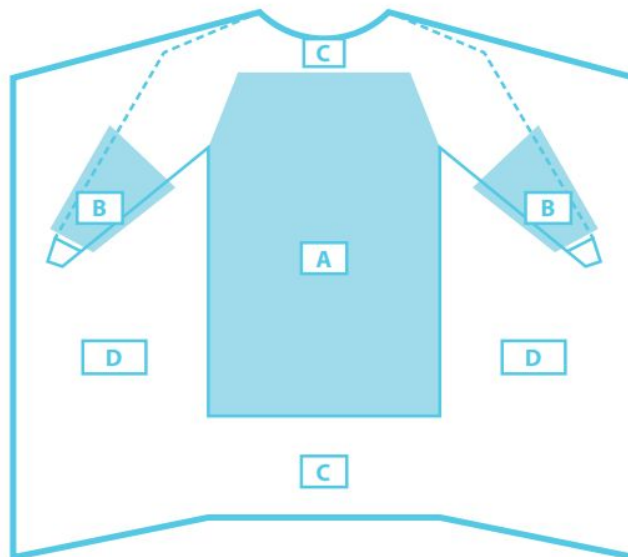
The below diagram shows the different regions of a non-surgical gown:

Region A – Critical Zone with highest splash risk.

Region B – Critical Zone with high splash risk.

Region C – This Zone must reach the minimum standards for Level 1 Gowns.

Region D – Non critical Zone with low splash risk. This region is not required to meet liquid barrier performance tests, and in some cases is left 'open'.



Graphic Source: Cardinal Health 2017

Resources:

[Surgical Drape and Gown Barrier Classifications by Cardinal Health](#)
[Medical Gowns - FDA - US GOV](#)

Surgical Gowns.

Surgical Gowns are for use in medium - high risk situations such as surgical procedures. The entire gown, excluding hems, bindings and cuffs are required to meet the standards for the Level that the gown is rated as.

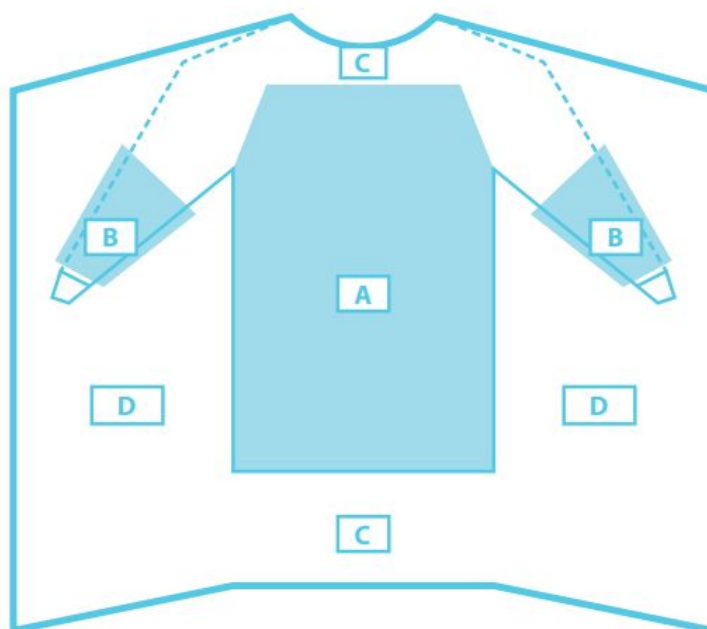
This means Region D is required to be protective and therefore the gown is not able to be open-backed.

Region A – Critical Zone with highest splash risk.

Region B – Critical Zone with high splash risk.

Region C – Critical Zone and must still meet the standards.

Region D – Critical Zone and must still meet the standards.



Graphic Source: Cardinal Health 2017

Resources:

[Surgical Drape and Gown Barrier Classifications by Cardinal Health](#)
[Medical Gowns - FDA - US GOV](#)

Government Advice on Gowns in COVID19 environments.

The NSW Government has developed a PPE Hand book regarding the use of surgical gowns in COVID19 environments.

In general clinical settings, aprons are an acceptable alternative to gowns, where supplies are not available. The only situations where a full isolation gown is needed, is when an [Aerosol Generating Procedure](#) is being conducted.

There are no stipulations around a particular level of gown that must be used in general clinical settings such as aged care homes – instead the [CEC PPE Guide](#) developed by the NSW Government says:

‘Isolation aprons/gowns (Level 1, 2, 3 and 4) which are **impervious or fluid resistant are suitable for contact, droplet and airborne precautions.’**

[Refer Page 5 of the CEC PPE Guide]

The guide does not recommend the use of sterile gowns in general clinical environments stating:

‘Sterile surgical gowns (Level 1, 2, 3 and 4) should only be used in **surgical environments and for sterile procedures.’**

[Refer Page 5 of the CEC PPE Guide]

Government Advice on Extended Use of Gowns.

Where extended use of PPE is occurring, the [CEC PPE Guide developed by the NSW Government](#) advises:

‘Extended or sessional use of apron or gown, (where no physical or close contact with a patient or patient zone is expected), based on HWs risk assessment on a **case-by- case approach.**

The assessment must include the risk for transmission of multi- resistant organisms (MROs).’

[Refer Page 24 of the CEC PPE Guide]

Standards Information.

The leading international standards for gowns are set out by Association for the Advancement of Medical Instrumentation (AAMI).

Key resources relation to gowns are:

- Report on [Selection of PPE for Healthcare Facilities](#)
- American National Standard for [Liquid Barrier Performance and classification of PPE for Healthcare Facilities](#)
- [Interim COVID19 PPE Recommendations](#) from the CDC



Time to care.