

# Appendix O: Support surfaces: Terms and definitions

The following list includes standardized terms to use when referring to support surfaces. NPIAP developed these terms and definitions to allow for standard, and clear language when describing support surfaces. Key terms are listed below and the full publication can be accessed here: [https://cdn.ymaws.com/npiap.com/resource/resmgr/s3i/Finalized\\_T&D\\_2024.pdf](https://cdn.ymaws.com/npiap.com/resource/resmgr/s3i/Finalized_T&D_2024.pdf).

**Table 25: Support surface terms and definitions**

TERM	DEFINITION
<b>Active support surface</b>	"A powered support surface, with the capability to change its load distribution properties, with or without applied load."
<b>Alternating pressure</b>	"A feature of a support surface that provides pressure redistribution via cyclic changes in loading and unloading as characterized by frequency, duration, amplitude, and rate of change parameters."
<b>Basic/standard hospital mattress</b> <b>*The term "standard hospital mattress" should not be used without a full description. Commonly used mattresses have changed over time and no 'standard' exists.</b>	"A term used to describe the mattress provided within a facility and generally used as the comparative intervention in research trials investigating the effectiveness of pressure redistribution support surfaces. As such, the qualities of a standard hospital mattress vary according to historical and clinical context and are rarely reported in detail in clinical trials. In most cases it is assumed that a standard hospital mattress is a non-powered foam or spring-based mattress."
<b>Gel</b>	"A semisolid system consisting of a network of solid aggregates, colloidal dispersions or polymers which may exhibit elastic properties. Gels can range from hard to soft."
<b>Low air loss</b>	"A feature of a support surface that uses a flow of air to assist in managing the heat and humidity (microclimate) of the skin."
<b>Non-powered</b>	"Any support surface not requiring or using external sources of energy for operation." (Energy = DC or AC electrical current)
<b>Overlay</b>	"An additional support surface designed to be placed directly on top of an existing surface."

TERM	DEFINITION
<b>Powered</b>	"Any support surface requiring or using external sources of energy to operate." (Energy = DC or AC electrical current)
<b>Reactive support surface</b> * May also be called constant/continuous low pressure	"A powered or non-powered support surface with the capability to change its load distribution properties only in response to applied load."
<b>Support surface</b>	"A specialized device for pressure redistribution designed for management of tissue loads, micro-climate, and/or other therapeutic functions. Support surfaces include but are not limited to mattresses, integrated bed systems, mattress replacements or overlays, or seat cushions and seat cushion overlays."

Source: National Pressure Injury Advisory Panel (NIPAP). Support surfaces standards initiative (S31): Terms and definitions related to support surfaces [Internet]. NIPAP; 2019. Available from: [https://cdn.ymaws.com/npiap.com/resource/resmgr/s3i/Finalized\\_T&D\\_2024.pdf](https://cdn.ymaws.com/npiap.com/resource/resmgr/s3i/Finalized_T&D_2024.pdf)