A NONWOVEN IS | A primarily fibrous assembly — other than a traditional paper, woven, or knit — which has been engineered to some level of structural integrity by physical and/or chemical means.

**Addendum: Relative Terminology Defined**

**FIBROUS ASSEMBLY** | A predetermined amount and arrangement of natural or manufactured fibrous material such as, but not limited to fibres, continuous filaments, or chopped yarns of any length or cross-section. It can be a planar (two-dimensional) or three-dimensional alignment of fibrous material.

**ENGINEERED** | An application of science to design, plan and manufacture products to utility specifications.

**STRUCTURAL INTREGRITY** | A measureable level of unity.

**PHYSICAL AND/OR CHEMICAL MEANS** | A specific method of bonding technology.

**PAPER** | Paper is traditionally regarded as a thin material produced by pressing moist, refined, wet laid cellulose fibers together and drying them to create a hydrogen bonded sheet.

The fibers in paper are typically short and always wet laid from a water suspension. When re-wet, the hydrogen bonds between fibers are broken, and paper typically loses almost all of its strength. The wet laying of refined fibers, plus the primary role of the hydrogen self-bonding that occurs between cellulose
fibers during drying, distinguish paper from nonwovens.

In a wet laid process where cellulose or other fibers are engineered to a level of structural integrity by physical and/or chemical means other than hydrogen bonding, the assembly can be considered to be a nonwoven. In some papers, to achieve wet strength, a polymeric binder (referred to as “wet strength resin”) is added to the structure, which would render it a nonwoven.

**WOVEN OR KNIT FABRICS**

These begin as a thread or yarn and are bonded together by interweaving, not arranged as individual fibers, thus being woven or knitted and not nonwoven.

**FILMS, NETS AND FOAMS**

These are cast from chemicals into their final form without individual fiber bonding, even though perforated films can appear to have individual fibers.

**STITCHBOND**

These materials are classified as nonwovens. They are primarily fibrous, and engineered to a given level of integrity by physical means for specific applications. The fibers are bonded by stitches sewn through the web to form a fabric assembly.

**WADDING**

Waddings are assemblies, primarily fibrous, engineered to a given level of integrity by various means for specific applications. Waddings are not woven, knitted, or made by a traditional paper process and can be considered nonwovens when bonded throughout the assembly.

**COMPOSITES AND MULTI-COMPONENT STRUCTURES**
NONWOVEN COMBINATION SYSTEM LAMINATES AND COMPOSITES

Generally, nonwoven composites and nonwovens combined with other discrete materials as a laminate can be considered as nonwovens.