Chemically, NOMEX® paper is an aromatic polyamide and is generally known as an aramid. The molecular structure of the material is particularly stable and the properties of NOMEX® paper are a consequence of this.

The paper is produced from two forms of the aramid polymer. Small fibrous binder particles – fibrids – are derived directly from the polymer under high shear conditions. These are mixed with short fibres – floc – which are cut to length from a fibre filament.

The two components, floc and fibrids, are combined in a water-based slurry from which a continuous sheet structure is produced on a specialized papermaking machine. The paper, as it comes from the machine, is low density with only moderate mechanical and electrical properties.

Subsequent densification and internal bonding is achieved by means of high-temperature calendaring. The resulting paper is mechanically strong, flexible and has good electrical properties, which are maintained at high temperatures.

During the papermaking process, the floc, which are longer than the fibrids, align themselves with the direction of the paper coming off the machine. There is therefore a significant difference in mechanical properties of NOMEX® paper in the Machine Direction – MD – and the Cross Direction – XD. Mechanical properties are thus quoted for the two directions.

Commercial production of NOMEX® paper was started in 1967 at the Spruance Plant located in Richmond, Virginia (USA). Today, this plant continues to be the primary producer of all the NOMEX® paper types. In July 1991, the NOMEX® paper plant in Richmond was awarded the ISO 9002 Quality Assurance Certification after undergoing a rigorous quality audit by a joint team from Underwriters Laboratories (UL) and the British Standards Institute (BSI).

Since early 1989, a selected number of NOMEX® paper types are also produced at the Mishima Plant, located in Osaka (Japan). The Mishima plant also achieved ISO 9002 certification in 1992.

Both facilities are also certified for compliance to ISO 9001:2000, the more stringent requirement recently developed.
# DIMENSIONS AND WEIGHTS

## NOMEX® TYPE 410

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<th>Roll Weight</th>
<th>Length</th>
<th>Roll Weight</th>
<th>Length</th>
<th>Yield</th>
<th>Basis weight</th>
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</thead>
<tbody>
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<td>mm</td>
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<td>yd</td>
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*Standard width 914 mm +/- 3 mm (36 inches +/- 1/8 inch) Standard width 1828 mm +/- 6 mm (72 inches +/- 1/4 inch)*

## NOMEX® TYPE 411

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*Standard width 914 mm +/- 3 mm (36 inches +/- 1/8 inch) Standard width 1828 mm +/- 6 mm (72 inches +/- 1/4 inch)*

## NOMEX® TYPE 414

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*Standard width 914 mm +/- 3 mm (36 inches +/- 1/8 inch)*

## NOMEX® TYPE 418

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<td>m</td>
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*Standard width 914 mm +/- 3 mm (36 inches +/- 1/8 inch)*
### NOMEX® TYPE 419

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*Standard width: 914 mm +/- 6 mm (36 inches +/- 1/4 inch)
**Standard width: 940 mm +/- 6 mm (37 inches +/- 1/4 inch)

### NOMEX® TYPE E56

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### NOMEX® TYPE 993

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### NOMEX® TYPE 994

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*basis weights & sheet weights include nominal moisture content