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# History Of Rubber Flooring

### SPECTRUM RUBBER FLOOR COVERINGS FOR COMMERCIAL INSTALLATIONS

Rubber flooring is the earliest used resilient flooring (1880) and a major advance was the discovery of vulcanizing by Mr Goodyear in 1893. During the 1960's, however, rubber was displaced by PVC with more modern looks, weld ability, lower price and a newly developed product.

However, now 40 years on, disposal of plastic is proving a problem. The environmental impact of PVC is making rubber now the natural choice for environmental and forward thinking designers and facility owners. The use of rubber in commercial areas has extensively increased in America and Europe due to its economic and health benefits and is now growing in Australia.

### WHY RUBBER OVER OTHER RESILIENT FINISHES?

#### **ACOUSTIC INSULATION**

Rubber has excellent sound absorption properties which can be further improved by using the X-Lastic Product. The sound insulation of 2mm rubber is 2.5 times that of 2mm homogenous vinyl.

#### ANTI BACTERIAL AND HYGIENIC

Rubber is impermeable, and because of the sulphur in the vulcanizing process and zinc, prohibits bacterial growth. (Sulphur and zinc are known antibacterial for 2000 years)

#### ANTI-STATIC

Rubber is considered naturally anti-static as it is not plastic; conductive formulations are available on request.

#### CHEMICAL RESISTANCE

Rubber flooring is resistant to all substances commonly handled using rubber gloves, even iodine stains can be removed from the floor.

#### COST

Now that rubber flooring is like vinyl, available in rolls 1.9m wide, fully weldable (but not generally required), 2mm thick and superior value, it is again accepted. Further as the flooring requires no coating, sealing or other expensive maintenance.

#### DURABILITY AND WATER RESISTANCE

The durability and resilience and totally impervious nature of rubber is renowned (as demonstrated by car tyres) and eminently suitable in high traffic areas.

#### **ENVIRONMENTAL ISSUES / LIFE CYCLE ASSESSMENT**

Spectrum Rubber Flooring has no formaldehyde, extremely low emissions, no plasticizers (carcogenic, a more unstable component) or heavy metals (persistant bioaccumulative toxic chemicals). European legislation is now restricting disposal and/or taxing of some flooring materials. (Reference Stockholm Convention and the European Convention to phase out PVC in Europe). Spectrum Rubber has no issues as endorsed by third party certification of environmental properties, with Ecospecifier and GECA certification. Spectrum Rubber is also Greenstar rated for office interiors, education, multi residential and healthcare.

#### FIRE SAFETY

Most fire codes in the world ignore smoke toxicity. However, fire tests comparing PVC flooring with rubber shows rubber takes 2-3 times the temperature and time to ignite; when it does burn, there are only trace elements of toxic gases. {Hydrogen Chloride (HCI) is one tenth of PVC, and Sulphur Dioxide one fifth). (Source: Comparative Test on Mondo Rubber and PVC by CSIRO Building Construction and Engineering, Australia 2002). Spectrum rubber passes the most stringent requirements of the building code of Australia. (Clause Cl.IO)

#### GREATER FLEXIBILTY

Rubber is extremely flexible and won't crack when coved or bent to European standards.

#### SLIP RESISTANCE

Spectrum Rubber has excellent slip resistant properties and provides a comfortable and sure underfoot feeling for students, mobility impaired people, as well as staff. (As with most floor coverings slip resistance is reduced when the floor covering is wet).



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#### POTENTIAL HARMFUL GASES RELEASED AT ROOM TEMPERATURE

All surfaces release gases into the air (VOC's). Measurement of these gases shows rubber to release one of the lowest concentrations. It is in the same bracket as bricks and mortar and certified by the US 'Greenguard' Environmental Institute for indoor air quality.

These emissions have been linked to asthma in concentrations released by PVC flooring and are sufficiently high to cause concern (VC exposure, including polyvinyl chloride is therefore, considered to best fit the weight-of-evidence category A, according to current EPA Risk Assessment guidelines, US EPA 1966). Agents classified into this category are considered to be known human carcinogens. (Source: EPA of USA Toxicological Review of Vinyl Chloride). The EPA lists PVC as a propriety pollutant; other products on this list include asbestos. Further, no odours are emitted compare to other resilient floor coverings which emit aldehydes

#### **CLEANING & MAINTENANCE**

Rubber flooring is considered to be one of the easiest floor finishes to maintain. It requires no stripping, waxing sealing or polishing. The material is washed with a neutral or mild alkaline detergent and/or disinfectant. Hence, the option of rubber flooring offers the benefit of a low maintenance, low cost floor covering with substantially reduced ecological issues.

This information is based on our experience to date and the results of careful testing. However, varying site conditions and methods of use influences practical application of the products. Their success is also dependent upon the professional judgment of the user and his/her conformity to proper trade practice, which are factors outside our control. The issue of this product information invalidates all previous information relevant to this product. This information is correct at the time of printing 20/01/2019 but the manufacturer reserves the right to carry out modification aimed at product improvement without notice. © Spectrum Floors 2018