



PERFORMANCE STANDARDS

Formica® decorative laminates are produced to conform to EN 438-2:2005 and ISO 4586. These standards define the performance of the various grades of laminate, in relation to their application. For example, the wear resistance specified for horizontal grade laminates is higher than that for vertical grade laminates.

To conform to these specifications, laminates are required to be tested for:

- Resistance to surface wear
- Resistance to boiling water
- Resistance to dry heat
- Dimensional stability
- Resistance to impact
- Resistance to cracking
- Resistance to scratching
- Resistance to stains
- Resistance to colour change in artificial light
- Resistance to cigarette burns
- Resistance to steam
- Post formability
- Reaction to fire

RESISTANCE TO CHEMICALS

Formica® laminates have been widely and satisfactorily used for many years in laboratories in medicine and industry. They easily meet the requirements of EN 438-2:2005, which specifies resistance to staining by over 40 substances which are likely to be encountered in everyday use.

These include tea, coffee, milk, citric acid, acetone, alcohol, fruit juices, detergents, bleaches and colouring agents, but do not include chemicals more likely to be found in laboratories. The chart below shows the effects of contact with some of the more aggressive materials commonly used in laboratories.

Performance Chemical

No effect after 16 hours contact time.

Acetic acid, acetone, ammonia, alcohol, amyl acetate, benzene, butyl acetate, carbon tetrachloride, caustic soda (solutions less than 10%), citric acid, detergents, olive oil, paraffin, phenol, petrol, soaps, sugar solutions, toluene, xylene.

No effect if completely removed within 10-15 minutes.

Caustic soda (solutions greater than 10%), ferric chloride, formic acid, hair dyes, hypochlorite bleach, hydrochloric acid (less than 10%), hydrogen peroxide (less than 30%), iodine, nitric acid (less than 10%), oxalic acid, phosphoric acid (less than 10%), potassium permanganate, silver nitrate, sulphuric acid (less than 10%).

Permanent staining or surface attack probable, necessitating immediate removal.

Hydrochloric, nitric, phosphoric and sulphuric acids in concentrations greater than 10%.