



Subject: Wood Floor Finishes for Non-Residential Applications

Other Tip Sheets and project planning assistance are available at 1-800-894-3777 or 945-0502

Hardwood floors in community centres and other public assembly buildings are often expensive to maintain. Typically these floors require refinishing with urethane on a 5-7yr schedule depending on the amount and type of use. There are number of different urethane products to choose from but basically they fall into two categories; water based and solvent based. In recent years we have seen more widespread use of water based urethanes for non-residential applications. Water based urethanes, depending on their quality, have about half the level of hard surfacing ingredients as solvent based urethanes, and so about twice the amount of water based urethane is required to get the same effective finish. Our experience is that even with heavier applications of water based urethanes the results are less serviceable and durable floors than those finished with solvent based urethanes. Most manufacturers do not warranty their water based urethane products for non-residential applications, and this plus the fact that water based urethanes can cost twice what solvent based urethanes do makes them a very poor floor finishing choice.

Floors to be urethane surfaced should be done according to the following application guidelines;

Caution is required with respect to flammability and ventilation (read the manufacturer's directions)

1. Floors should be sanded, cleaned and rinsed prior to any application
2. 5 coats solvent based urethane @ 3mils wet thickness per coat (guages are available through most paint distributors)
3. Floors should not be sealed or primed with anything other than urethane prior to application
4. 1st coat, if on a porous surface (raw wood), 8 square meters per litre coverage
5. 1st coat, if on a non-porous surface (previous urethane), 12 square meters per litre coverage
6. 2nd to 5th coats, 12 square meters per litre coverage
7. 24 hour curing intervals are required between coats (this will vary depending on the temperature and dampness of the floor)
8. if more than 36 hour curing intervals between coats then floor should be sanded between coats
9. 48 hours curing after final coat before rough use

Before selecting a floor finish you should be aware that many facilities are finding very satisfactory and lower cost alternatives to urethane finishes. Some facilities have stepped a century into the past to rediscover raw linseed oil as a wood floor finish. Not only does this finish rejuvenate the floors but it can stop or even reverse shrinkage cracks and tighten old floors against squeaking. The downside to linseed oil finishes, is that although a low cost and low maintenance alternative, they don't offer the same hard, clear and lustrous finish that urethane users have come to expect. Discriminating dancers and some other users may not favour the darker, less slippery surface.

Some other facilities have stepped into the more recent past and rediscovered wax, or rather have become acquainted with a new generation of floor waxes. One busy community hall reports that (other than regular cleaning) their entire annual maintenance requirement is 2 volunteers x 4hrs x 2 times per year to rewax their floor (using no strip wax, they say that they haven't stripped their floor in 4 years). Their floor isn't the gleaming expanse that a urethane floor is, but they like it and they save thousands of dollars every 5-7 years which they can spend on something else.