

COLD CRACK PROPERTIES

CGT in-ground swimming pool vinyl has been formulated to meet a cold crack rating of -35°F according to test method ASTM D1790. The temperature determined by the above test method is the lowest temperature at which at least 50% of the samples folded into a loop and subjected to sever impact, do not crack into two separate pieces.

This method can be thought of as a yardstick which can be used to compare the inherent cold crack resistance of different materials under the same conditions of impact.

Vinyl materials with a cold crack rating of +40°F (i.e. possessing virtually no inherent cold crack resistance) can be subjected to temperatures as low as -40°F and -50°F and remain free of cracks or breaks, as long as they remain immobile. Therefore, it is apparent that the severity of impact or flexing is the most important factor that results in failure of vinyl materials at low temperatures.

Liners that are installed in a pool are held immobile by the beading and the water pressure. Incidents of failure due to cold crack are extremely rare since it is not possible for the liner to flex. Damage caused by ice is considered to be rupture due to high pressure rather than low temperature failure.

On the other hand, liners moved around warehouses, shipped on unheated transport trucks or allowed to drop during unloading may occasionally crack if the combined effect of low temperatures and impact is severe enough.

RECOMMENDATIONS

1. If possible, avoid shipping liners when temperatures are likely to fall below -10°F.
2. Secure the cartons or drums containing the liner so that they are not able to bounce or shift when being transported over rough roads.
3. Do not store liners in containers outdoors.
4. Handle liners with care in cold weather. Do not allow containers to drop or be hit by any moving object.