

New Hanover Memorial Hospital-Wilmington, N.C.

Rubber Flooring Zeros In On New Hospital Building Market!

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Rubber flooring, for years, the prestige product of the resilient flooring market, has been enjoying a resurgence in markets where the inherent qualities of resilience, flexibility, dimensional stability, underfoot comfort and safety are prime requirements. Hospitals, nursing care homes, medical buildings of all kinds are typical examples in the building field and in the transportation field where temperatures can range 150° Fahrenheit, rubber flooring is ideal for buses and rail cars.

Because hospital floors have special requirements we have directed our effort to this market, particularly the new hospital building market. This concentrated effort is not by chance.

About ten years ago we received a letter from a New York City hospital consultant requesting literature and samples of items we manufacture for hospital floors. This consultant for the New York City Department of Public Works evaluated flooring products on the market and recommended the most suitable product for their floors, in anticipation of a program to build new metropolitan hospitals. Based on these evaluations, sheet rubber flooring was selected and specified for projects then on the boards.

As part of this evaluation it was necessary first to establish basic criteria for prevailing situations and then match the available products against them.

What are these criteria?

To begin with in the patient-care areas and its corridors there is the need to recognize and consider the fact that "the modern hospital is characterized by movement". The tremendous volume of wheeled equipment traffic deserves a flooring surface which will not resist easy rolling over it; much of this equipment, such as food carts, portable X-ray, library carts, linen carts, medication carts, etc., is heavy, and a drag on its casters makes wheeling a burdensome

task; neither must the surface impede ease of walking by personnel, or unduly resist the shuffling over it by patients trying out their limbs again after a protracted confinement in bed.

Another criterion is the need for resilience. Its cushioning effect is needed to reduce the shock impact on the spine.

A third desirable feature is sounddeadening of the traffic movement over the flooring material. The clopclop of leather-heeled shoes can be quite disturbing and annoying.

A fourth desirable characteristic is resistance to surface pitting and consequent evidence of dirt accumulating in depressions or in joints of the material. Consequently a minimum of joints is a desirable feature.

Dimensional stability, with neither shrinkage nor expansion, is still another important feature to insist on in a flooring surface. Shrinkage opens up the seams to bacteria-breeding; expansion lifts up the surface at the joints and may be hazardous to traffic.

Density of material, non-porosity, and non-absorption, should also characterize the flooring material; these qualities make for easy cleanability and good resistance to penetration by staining agents.

Resistance to stains from cigarettes

is worthy of much consideration. Maintenance, generally, is a big responsibility. Rubber floors help to reduce this burden on many counts. Resistance to burns from cigarettes around telephone booths, elevator lobbies, vending machines — most anywhere — will substantially reduce maintenance costs.

Control of Nosocomial Infections

In an article entitled "Architectural Planning for Control of Nosocomial Infections" (June 1960 — Hospital Management) Consultant Joseph Blumenkranz of New York City has to say about flooring:

"In selecting flooring material, stress must be laid on the need for a drastic reduction of joints, because they frequently are the breeding beds of bacteria. Waterproof sheet flooring, with joints sealed with epoxy sealants is preferable to the conventional tile-size resilient floors. It is estimated that the latter has more than 20 times the length of joints than sheet material. The turning up of sheet flooring at wall intersections can form a sanitary cove almost free of seams. Standard nonferrous metal cove corner fillers are available for use in conjunction with the upturned type of cove base. The set-on type of resilient base is definitely not recommended because it is virtually impossible to obtain a tight joint between it and the floor."

Sufficient resilience for coving up of the material on the walls to form an integral base is a significant advantage. Sheet rubber definitely offers this opportunity. This is particularly desirable in order to do away with the need for installing a set-on base, which seldom-if-ever can make a perfect fit to the floor surface and therefore offers an inaccessible haven to infection-bearing pathogens.

A Sound Story

Because of its relative softness in comparison with other resilient flooring materials sheet rubber is quieter than these when walked over with leather heeled shoes; it is also less slippery and less fatiguing than other so-called resilient floorings.

Also, the exceptional dimensional stability of rubber permits its use in sheets of great widths and lengths, without seams. By overlapping and double-cutting the material, a continuity surface is obtainable with virtually invasion-proof joints which dirt cannot penetrate.

It can be concluded that the criteria for a most appropriate flooring





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in patient care areas include: comfort underfoot with a minimum of fatigue, a non-slip surface, dimensional stability, ease of maintenance, cleanability, a minimum of joints, sufficient resilience for turning up on walls to form an integral base, long wear, and economy of cost.

Based on comparisons of various materials now obtainable, sheet rubber meets all these criteria much better than others.

Hospital Market Testimonial

The evaluation program for the New York City Department of Public Works directed our attention to the hospital market and one of the earliest hospitals to install sheet rubber floors was the Jewish Hospital and Rehabilitation Center in Jersey City, New Jersey. Most of the patients at this hospital are senior citizens who require extra care and underfoot safety for these patients is of utmost concern.

We quote from a letter to us from Mr. Arthur Littlestone, Assistant Administrator of Jewish Hospital and Rehabilitation Center of New Jersey.

"We are pleased to compliment your company on the performance of your sheet rubber flooring. The flooring was installed in our hospital about 10 years ago and we are well satisfied with its appearance and durability.

"In addition to meeting the needs of a typical hospital, our floors are subject to extreme wear due to the fact that most of our patients are very aged and shuffle instead of walk.

"Our rehabilitation program brings to us patients who are "wobbly" underfoot. The need to provide as much safety as possible for these patients is obvious and we are pleased with the resilience and noise reduction it affords.

"Our Exec. Housekeeper reports that the floors are easy to care for and we have received many compliments on the appearance of our floors."

Mr. Richard C. Welchin, Administrator of United Church Homes, Canal Fulton, OH, writes: "I am recommending that the same rubber covering be used in our new addition that is soon to be built for two reasons: (1) I believe that our labor and material cost for maintenance is lower than for any other floor covering now available and (2) I want to maintain the same bright, cheerful, spick and span appearance that our building now has. The compliments that we receive on our shiny clean home are many."

From a letter from Sister M. Martin C.S.J., Administrator of St. Joseph Memorial Hospital, Kokomo, Indiana, we quote: "We believe that the sheet rubber flooring is more resilient and, therefore, more comfortable for our nurses who must spend long hours on their feet. It is attractive and extremely easy to care for. The stair treads which we have used in adjacent areas are also attractive and durable."

It has been our practice to display our flooring at the American Hospital Association Annual Conventions. This is where the manufacturer comes face to face with hospital administrators, housekeepers, engineers, and nurses. These are people on the firing line who have firm opinions about underfoot comfort and practicability. Administrators have told us that our rubber flooring contributes much toward a clean, sanitary atmosphere and that when they wheel the patient into the hospital "he knows he's in the right place".

Excellent Performance In Other Markets

Another important market where rubber flooring has performed excellently for many years is the transportation market, or, to identify this market in modern terms — the business of moving people. Generally, this market breaks down to buses or rail cars.

The performance requirements in this field differ from the building field in some respects, but, the inherent characteristics of wear resistance and flexibility of rubber are of major importance.

Buses of all kinds might operate in areas where the temperature can be over 100° Fahrenheit or minus 50° Fahrenheit, and the floors must be able to take this exposure to bouncing, twisting and stress without cracking or breaking. School buses travel over a lot of bad roadways where these conditions are severe.

Railroad cars, commuter rail cars, city and inter-city buses also have these requirements, along with the need for resistance to cigarette burns, spillage of all kinds and the need for colorful appearance.

Here again, rubber flooring serves this market best. □