



IMPROVE ANY SPACE BY STARTING WITH THE FLOOR

Designs for
dementia sufferers

DEMENTIA, THE NUMBER 1 ENDEMIC DISEASE

FACT

The Netherlands is home to more than 270,000 dementia sufferers, and this figure will exceed half a million by 2040.

Designing an interior for a nursing home catering to residents with dementia is no easy feat. Various target groups all need to be served simultaneously and there are many areas of attention and pitfalls. In this white paper, Forbo Flooring wishes to provide insight into designs for dementia sufferers, while also looking into the right choice of floor for nursing home. In doing so, we shall use information from:

the 'Art and Science of Dementia Care' study by the Cordaan care institution and the Creative Industries Fund NL, with support from the Ministry for Education, Culture and Science; the book titled 'Het Verpleeghuis van de toekomst is (een) thuis' (the future of nursing (at) homes) by Springer Media, with collaboration by many experts; information from the Kenniscentrum Wonen en Zorg (knowledge centre for housing and care); Forbo Flooring's many years of experience with this subject. Forbo Flooring experts participated in the research and the book.

Let's start with the 'Art and Science of Dementia Care', aimed at improving the quality of the living environment of dementia suffer-

ers, with focus on nursing homes. The research comprised a design laboratory, established and supported by architects Caro van Dijk and Henri Snel, experts in the design of care institutions. Also involved in the collaboration were scientists, designers, care experts and suppliers in various multidisciplinary teams. Besides gathering and analysing information and writing a manifest, this working group also designed and tested affordable, small-scale, practical applications and prototypes.

With a dementia sufferer residing in a nursing home with a PG (Psycho-Geriatric) department as a reference point, the working group's research was aimed at formulating ideas for an ideal care institution and surroundings. In doing so, careful attention was paid to possible interaction between guests, other users, the building and its surroundings. And so the multidisciplinary team arrived at five key values: identity, connection, contact, activation and comfort. Connection is the magic word, as it brings many of the other key values to life.

CONNECTION TO THE NURSING HOME AND SURROUNDINGS

FACT

30% of dementia sufferers lives in a nursing home.

Nursing homes need to be connected to their surroundings, as this improves the well-being of residents and ensures acceptance and engagement by society. Moreover, a mildly institutional atmosphere in an easily accessible, attractive and transparent building has an inviting effect on the surroundings. Bring the outside world in and accommodate opportunities for social interaction with residents. Think in terms of semi-public areas where neighbourhood activities can take place. This encourages a natural connection between the care institution and its surroundings.

The working group is of the opinion that nursing homes will be increasingly integrated in villages or neighbourhoods in the future, which will offer freedom, safety and respect. Furthermore, care centres will more and more often accommodate people who do not (yet) require care.

The connection between users of the building with the nursing home in which they live, work or visit, is equally important and increases the well-being of residents. An environment must therefore be created which is comfortable for all users and is an attractive



place in which to live and work, and visit. In terms of the design therefore, a functional and aesthetic environment must be created which takes account of the needs of all users from often widely varying backgrounds. Create an atmosphere which is inviting within the neighbourhood, which tempts visitors to stay and which offers privacy to residents and their visitors. The design can also serve as confirmation and reassurance for patients, and is ideally a pleasant location for carers to work. Create a design which refers to the past instead of mimicking it, which is timeless instead of nostalgic and whose basis lies in the strength of classic designs.

A third desirable connection is that between residents and their surroundings, as semi-public areas reduce the idea of being locked up. Such areas tend to slow deterioration and stimulate the enquiring minds of the patients. Turn the building into an experience in the form of a type of safe adventure by working with clear routing, including places of interest and other sensory experiences in the corridors of the nursing home, for example.



THE NURSING HOME INTERIOR

FACT

Light, airiness, spaciousness and freedom of movement are important stimuli.

A nursing home is both a residential facility and a workplace, while also serving as a visitor centre. The nursing home interior must facilitate the various users, providing an environment which is user friendly and visually attractive for all users. The design must be based on the total package and a single design style without losing sight of individual needs. Let's take a closer look at the users' needs.



RESIDENTS' NEEDS

FACT

Autonomy, the ability to influence one's own environment resolves disquiet and agitation.

Residents have a need for a cosy environment which is familiar and safe. It must offer spatial comfort, good acoustics, freedom of movement and sufficient opportunities for social interaction. Pleasurable sensory stimuli are also important, along with individual solutions where necessary. Create a 'readable' environment in which it is easy to find your way. This facilitates mobility.

CARERS' NEEDS

As far as carers are concerned, the facility must offer a pleasurable working environment which is hygienic, easily maintained, safe, efficient and which has orderly areas. The focus lies on patient well-being.

VISITORS' NEEDS

Many of these values are also important for visitors, including safety, hygiene, quality and focus on patient well-being. The surroundings must also be attractive, and must offer privacy and comfort.

PRIVATE ROOMS IN THE NURSING HOME

FACT

Personal effects which refer to the resident's past, give a sense of familiarity or recognition.

Finally, to conclude this first part of the white paper, let's briefly look at the residents' private rooms in the nursing home. A private room works like a safe and protective cocoon and must have this look and feel. There are many possibilities for keeping the cognitive process active, around the bed and generally in the room. Senses can be stimulated by means of materials, sounds, scents or images. It may be possible to visualise the identity and the life story of residents via the interior, serving not only as a visual recognition point for residents, but also stimulating contact and interaction with carers and visitors. From here, there should be a gradual transition to more open public spaces. Provide gentle transitions to those areas of the nursing home with a great deal of daylight, for example. The idea is to try to stimulate residents to be mobile and to connect to the outside world in order to prevent them feeling locked up and lonely.



THE BEST FLOOR FOR A NURSING HOME

FACT

Exposure to daylight improves sleeping patterns.

The above information gives all kinds of starting points for flooring in a nursing home, and how it should look. Also interesting is to look at the qualities and properties of the flooring. Exactly how should you choose the appropriate floor in that sense?

As already described, the trend is to make a nursing home as homely as possible, which is clearly expressed in the tendency for small-scale residential units. Long, impersonal corridors are no longer accepted. Residential groups are designed in which residents can cook and wash for themselves under supervision. This same trend is continued in the way in which the interior is designed, with residents increasingly able to bring their own furniture to the nursing home. Of course, we no longer want impersonal, cold 'plastic' flooring against such a background.

Besides the atmosphere, flooring can also greatly influence many other aspects, and can even support or disturb the primary care process. After all, there are a number of important differences between a nursing home and a normal home, due to the nursing home also being a working environment. Its intensive use also makes much



more stringent requirements of the materials used. Not all floors are suitable for use in a nursing home,

and there is no one specific floor finish which offers the perfect solution. Not only because of the variety of target groups living within a nursing home but also because different rooms are used for varying purposes. Moreover, each organisation has its own strategic targets and own signature which will influence the choice.

A number of relevant aspects are named below, in order to arrive at the best choice of flooring for a nursing home. Some of these aspects may however be conflicting.



FLOOR CLEANING AND MAINTENANCE

FACT of the life cycle costs of a floor lies in its maintenance.

Cleaning and maintenance of floors is an expensive item within a building. This is not only because of the large surface area but also because they are probably the most intensively used part of the interior. Moreover, floor maintenance can also disturb the primary care process due to certain areas being temporarily out of use. While most flooring is simple to keep clean, it is always sensible to request as much information as possible from the manufacturer and the cleaning company in order to gain a realistic idea of the costs and maintenance required for the flooring. This will prevent any unpleasant surprises.

Nursing homes are generally characterised by a great deal of wheeled traffic. Think in terms of walking trolleys, wheelchairs, hoists and beds. The rolling resistance can vary considerably between different types of

flooring and it is therefore important to take this factor into consideration when choosing a suitable flooring material. Hard floors obviously offer less resistance than textile floors, though there are also differences within the category of hard floors. Acoustic floors are slightly more resilient, for example, which also increases their rolling resistance.

Furthermore, environmental care is by now an important factor within many organisations. Nowadays, EPDs (Environmental Product Declarations) are increasingly used in order to objectively compare the environmental burden of various floor finishes. An independent party determines the environmental impact of a product throughout its life cycle, allowing you to very simply compare various types of flooring and their manufacturers.



CHOICE OF FLOOR COLOURS

FACT Carpet is a soft and tactile material, which is extremely pleasurable for people who must rely on their senses.

We can offer you a number of practical guidelines when choosing the best colours for flooring:

- Stay away from overly light or dark coloured flooring, not only from a practical point of view (cleaning costs), but also because of the possible visual limitations of residents. The LRV (Light Reflection Value) indicates how much light is reflected by a type of flooring.

- Colour contrast. Avoid too many contrasts in the floor, though there must be sufficient contrast with wall colours.

- The design is also important. Too plain a design is not practical and too intricate a design may become confusing.

- Noise has a large impact on the well-being of nursing home residents, which makes noise and reverberation reduction extremely important. Textile flooring scores particularly

well in this sense. The independent Peutz advisory agency has conducted a study into the acoustic quality of various types of floor finishes. The results of the study can be requested from Forbo Flooring. Some types of flooring result in a noise reduction of up to 28 dB.

Residents of a nursing home are often not particularly mobile, and the right balance must therefore be found in the floor, between smooth and non-slip. The non-slip properties of a hard floor are expressed as R value, whereby the most suitable floors will have values of R9 or R10. That will help prevent falls. In wet areas, a proper non-slip floor must be fitted, with a minimum non-slip value of R10. Also ensure there is an entrance flooring system, as it stops up to 94% of walked in dirt and moisture.

Stain proof and fire-retardant floors

Urine can be particularly problematic in nursing homes, and the impermeability to such stains varies from floor to floor. A water-proof floor is the best option in areas where this is a commonly occurring problem. Tiles and panels with seams are then less suitable types of flooring. A PVC floor can easily withstand prolonged exposure to the chemicals (medication) in urine on the other hand. Urine also gives odour problems, which needs to be taken into account in the design, paying extra attention to cleaning and maintenance of the floor.

According to the IBMZ organisation (Incident management in Care institutions), there have been more interior fires than ever before in care institutions, in recent years. As evacuation always takes place over the floor, it is sensible to check the fire safety of flooring. Generally speaking, fire class Cfl S1 suffices. The higher Bfl S1 fire class is recommended for emergency routes (entrances and exits).



RANGE OF FLOORING FOR NURSING HOMES

Forbo Flooring has compiled a range of flooring specially for nursing home which care for dementia patients. The floor solutions in this range contribute to safe, familiar and pleasant rooms and atmosphere, for residents, carers and visitors to the nursing home alike.

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