

### **Learning Objectives**

- Understanding of:
  - What is dementia
  - Types & symptoms of dementia
  - Design to support living well with dementia
  - HBN Guidance
  - Design Principles for Dementia-Friendly flooring

 Increased confidence in specification for dementialed facilities







# **Background to Polyflor**

- Founded in 1915
- Manchester textile manufacturer
- 1950s pioneered homogeneous vinyl floor coverings
- 1983 first safety flooring launched containing aggregate particles
- Manufacturing for 100 + years a major manufacturer and employer in Manchester
- Extensive experience in care sector, supplying flooring to new build and refurbishment





# **Background to Polyflor**

- Quality driven company
- Strong commercial focus
- Excellent customer support
- Socially responsible, committed to sustainability









# Company commitment to Dementia Care sector

- Work with University of Salford & Salford Institute for Dementia
- Partner of International Dementia
   Design Network
- Member of local Dementia Action
   Alliances
- Polyflor staff undertaken Dementia
   Friends information sessions
- Member of SBID Healthcare Design Advisory Council















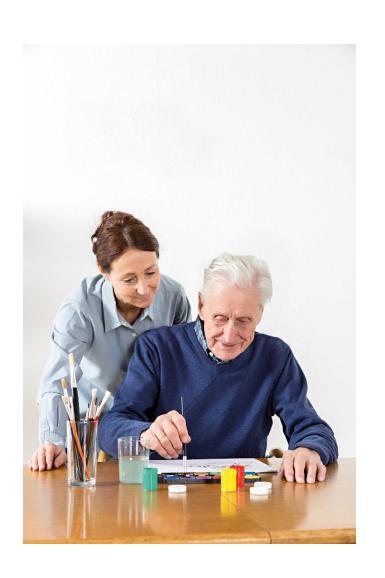
#### What is Dementia?

- Umbrella term describing symptoms of brain diseases
- Irreversible death of brain cells
- Not a normal part of ageing, terminal illness
- Affects memory, language, understanding, thinking, daily activities
- •Over 100 types of dementia: Alzheimer's, vascular, lewy body, frontotemporal





#### What is Dementia?



- •People with dementia may have other health conditions as normal part of ageing e.g. sight loss, heart disease
- 1 in 3 people with dementia also have significant sight loss
- Someone with dementia & sight loss reduced visual functioning/perception
- Issues with depth and colour perception, glare sensitivity
- Inclusive design for whole person required rather than just dementia symptoms





#### **Dementia Statistics**

- People living with dementia worldwide 47.5 million, expected to be 75.6 million in 2030 (WHO, 2015)
- UK 850,000 diagnosed with the condition, many more undiagnosed (Alzheimer's Society, 2015)
- 1 in 14 people over 65 in UK will have dementia, although 40,000 under 65 have early onset dementia (Alzheimer's Society, 2014)
- Estimated 1 in 3 of us will have family or friends with the condition



# Design to support living well with Dementia

- •Growth in dementia rates ageing population, people living longer
- •Flooring manufacturers need to be transparent on suitable dementia-friendly flooring options
- Designs within hospitals, residential care& housing need to be future proofed
- Designs to promote homely feel and reduce anxiety & stress levels in patients
- Some UK hospitals undertaking dementia audits looking at interior surfaces
- Not just flooring lighting, signage, acoustics, wayfinding

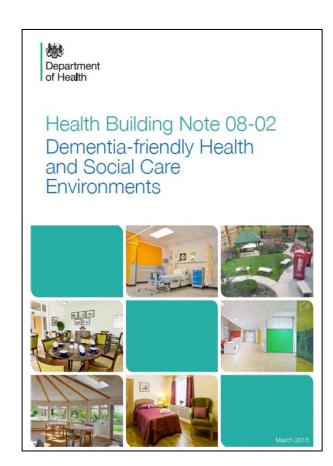






# **Health Building Note 08-02**

- Health Building Note for Health & Social Care Environments
- Detailed information on dementia types, stages & prevalence
- •Covers core design features such as lighting, acoustics, colour, furniture & fittings, signage and flooring
- •12 overarching design principles presented for dementia-friendly environments







# HBN 08-02: Design Principles for a Dementia-Friendly Environment

- •1) Provide a safe environment (the overarching principle)
- •2) Provide optimum levels of stimulation
- •3) Provide optimum lighting & contrast
- 4) Provide a non-institutional scale and environment
- •5) Support orientation
- •6) Support way-finding and navigation



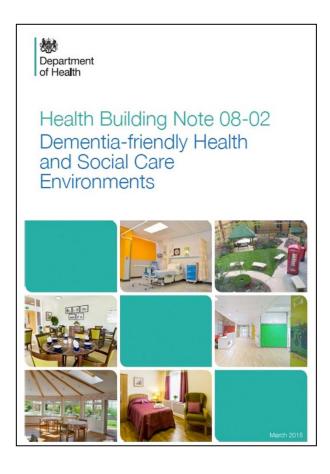
Health Building Note 08-02 Dementia-friendly Health and Social Care Environments





# HBN 08-02: Design Principles for a Dementia-Friendly Environment

- •7) Provide access to nature and the outdoors
- •8) Promote engagement with friends, relatives and staff
- 9) Provide good visibility and visual access
- •10) Promote privacy, dignity and independence
- 11) Promote physical and meaningful activities
- 12) Support diet, nutrition and hydration





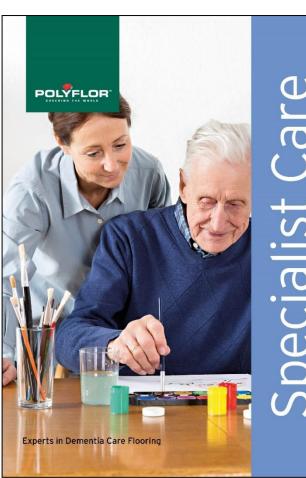


# Specialist

# **Design Principles for Dementia-Friendly Flooring**

**University of** Salford

- Worked with University of Salford to develop new flooring principles
- Developed to assist specification of suitable flooring for dementia spaces
- Principles refer back to Department of Health Guidance & their overarching design principles for dementia-friendly environments
- Principles discussed & agreed with **Dementia Associates**









# 1. Develop one continuous flooring surface

- Seen & experienced as one continuous surface
- Flooring with small tonal contrast & similar LRV in adjacent areas
- Large contrast could be seen as a step & cause confusion or agitation
- Barrier matting/threshold strips – blend tonally with adjacent flooring





#### 2. Careful use of tonal contrast

- Large tonal contrast required between staff only & resident areas to provide visual barrier
- •Flooring should tonally contrast against walls, skirting, furniture & sanitaryware (30 points) to aid wayfinding

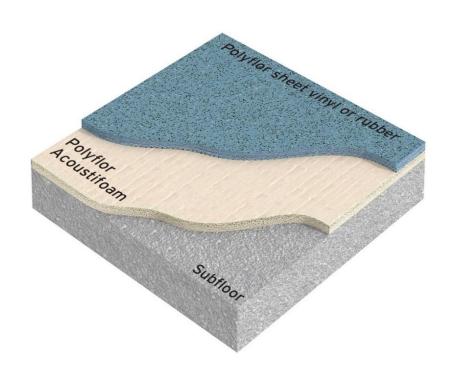






# 3. Reduce impact sound

- Strike balance between room being too noisy & too sound absorbent so space is monotonous
- Choosing acoustic flooring can help soften hard & noisy environments
- Reduce impact sound transfer between rooms on different levels (17dB + requirement for Building Reg)
- Create peaceful environment





# 4. Accentuate colours to give depth

- Use strong hues/colours to give more depth to a room
- Helps perception of shape & size of room, aids wayfinding
- Rooms appear two dimensional if colours are subdued
- Avoid very dark colours holes to fall into, emotions of imprisonment





# 4. Examples











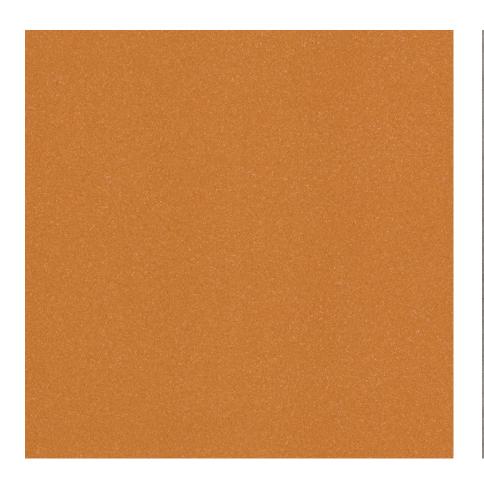
# 5. Avoid sensory overload & false steps

- Use products without busy designs, colours & patterns
- Avoid inlaid logos and borders
- Avoid highly contrasting grout lines in flooring
- Busy designs can contribute to sensory overload
- Perceive a false hole or step or see pattern as something it is not





# 5. Examples







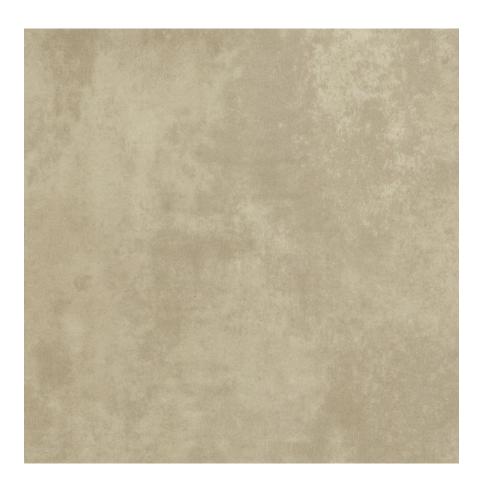
# 6. Reduce sparkle

- Use flooring without sparkle like pearlescent
- Can be perceived as being a wet surface
- •This would cause anxiety and change in walking style that may increase risk of slipping
- People with dementia may stop completely





# 6. Examples







#### 7. Promote the use of a matt floor finish

- Use flooring with a matt appearance rather than glossy
- •Glossy flooring gives problems of glare or pools of reflected light from overhead lighting is magnified
- Glossy surfaces may be perceived as slippery or wet
- lead to confusion & anxiety





# 8. Blend flecks with the tone of main floor surface

- Avoid floors with secondary flecks/speckles highly contrasting to base colour
- •Flecks may be interpreted as pieces on floor surface that need to be picked up & thrown away
- Increased agitation levels
- Solid looking colour or flooring with subtle tonal secondary flecks preferred





# 8. Examples









# 9. Avoid unpleasant smells and odours

- •Consideration to smells that build-up through food/liquid spills and incontinence
- People with dementia have strong emotional reaction to smells & odours leading to stress & confusion
- Choosing right flooring product along with appropriate & regular cleaning regime important
- •Products with built-in maintenance enhancements are preferable

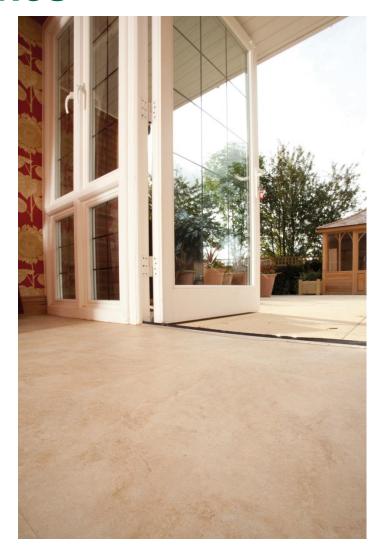






# 10. Provide good transition between differing floor finishes

- •Sudden changes of material type, low to high friction or soft to hard may cause confusion and present a fall hazard
- Transition should be smooth as possible - avoid any pronounced changes in surface finish
- Raised embossed flooring limited to areas where safety flooring required e.g. wet rooms & barefoot areas





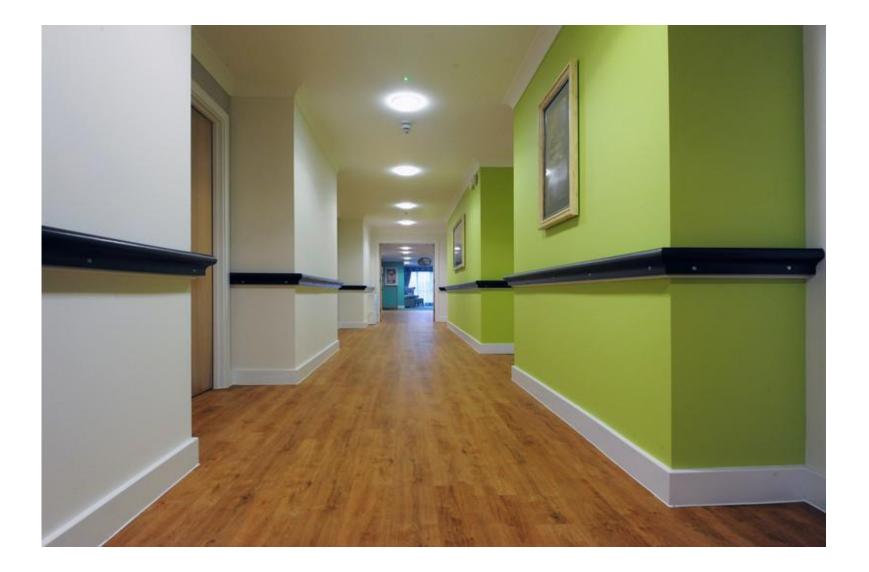


















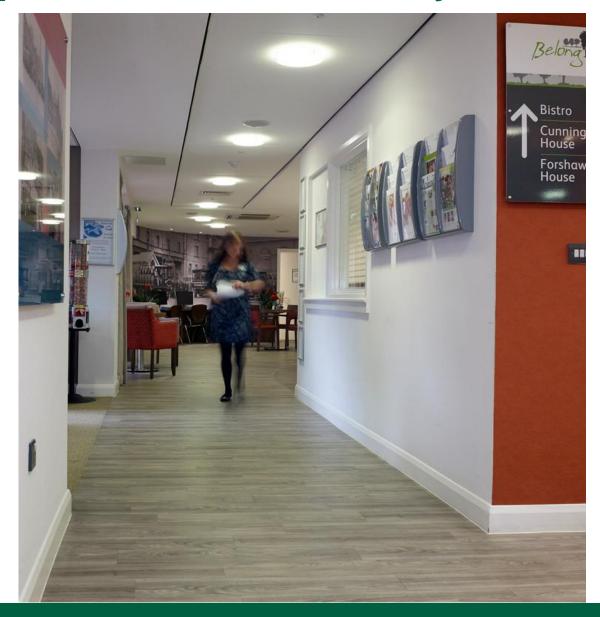










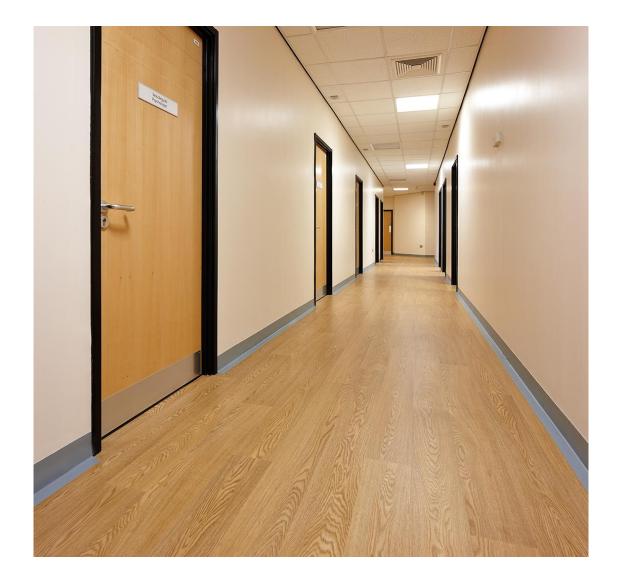




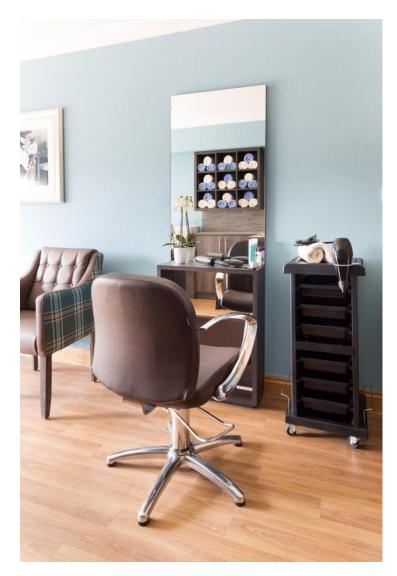
















# Case Study: Positive Impact on Patients & Staff

- Croydon University Hospital
- Refurb to create a dementia community hub
- Safe wander loops & integrated seating
- Wood effect flooring chosen to contrast with furniture & wall surfaces (LRV)
- Replaced shiny vinyl with dark patches unsuitable for dementia patients
- Low lighting replaced to aid visually impaired & provide clarity
- Transition strips replaced with full sheet install over thresholds













# **Summary**

- Dementia is a terminal illness, progressive death of brain cells
- Many types of dementia with a variety of symptoms – not one symptom fits all
- •Growth in dementia rates ageing population dementia-friendly designs needed now to future proof
- Those with dementia have other health conditions such as sight loss
- Inclusive design for whole person required







# **Summary**

- •Flooring manufacturers need to give view on dementia-friendly ranges to help client make final choice
- Dementia-friendly flooring designs should promote homely feel & help reduce stress/anxiety
- •HBN 08-02 produced by Department of Health with guidance principles
- •10 flooring design principles link back to HBN 08-02
- •Flooring is just part of the solution working in tandem with other design elements





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