Kährs Group

Light Reflectance Value - LRV
Reflektionsvärde – LRV

November 2018

Article	Product	Color	LRV value	Standard Deviation STDAV /STDEV
153N6CEK1J	Oak Lava	dark brown	3	0,5
152N6BEKF4	Oak Terra	light brown/grey	13	3,7
153N3REK09	Oak Smoke	brown	14	3,5
37101FVA09KW	Linnea Walnut Statue	brown	15	2,7
15313REK15	Oak Palazzo Fumo	brown	16	5,0
153N38EK50	Oak Como	natural	25	4,9
143N19EK12	Oak Natural Matt 3S 5G 24	grey/white	26	5,4
153N38EK09	Oak Como Matt	natural	27	
133N19EK15	Oak Lecco	natural	27	7,0
153N3BEKD4	Oak Twilight	light brown/grey	27	2,7
151N4AEKD4	Oak New Grey	grey	29	2,0
15314BEK20KW	Oak Palazzo	white	33	4,3
153N3BEKC4	Oak Mist	white	33	4,7
6438117009618	Oak FP 138 Natur New Arctic 5G	white UV-oil	34	2,3
133N19EK1V	Oak Abetone	white	35	5,0
143N02EKW2	Oak Vanilla Matt 3S 5G 24	white	35	9,0
373059EK0VKW	Linnea Oak White	white	35	5,5
153N1BAKH4	Ash Stream	grey	35	3,0
6438117010249	Oak Vanilla Matt 3S 5G	white	36	4,0
153N6EEKFV	Oak Dew	white natur oil	39	4,1
153N19EK0N	Oak Taranto	white	41	4,0
151N9MEKM0	Oak Sorano	grey/white	42	3,2
153N18AK09	Ash Kalmar	natural	43	9,8
151N8AEKB4	Oak Sky	light brown/grey	44	2,8
153N19EK0N	Oak Taranto	white	45	4,2
153N18AK0V	Ash Skagen	white	52	6,7
153N0BEK0W	Oak Limestone	white	52	6,1
153N1BAKG4	Ash Flow	white	55	8,0
151L8AEK0W	Oak Nouveau Snow	white	58	4,0
152N5BAKG4	Oak Flow	white	63	3,3
6438117010386	Ash Natural Vanilla Matt 3S 5G	white	65	4,3
151N8MAKA4	Oak Air	white	76	2,8
372016AKW1KW	Linnea Ash Blizzard	white	88	0,4

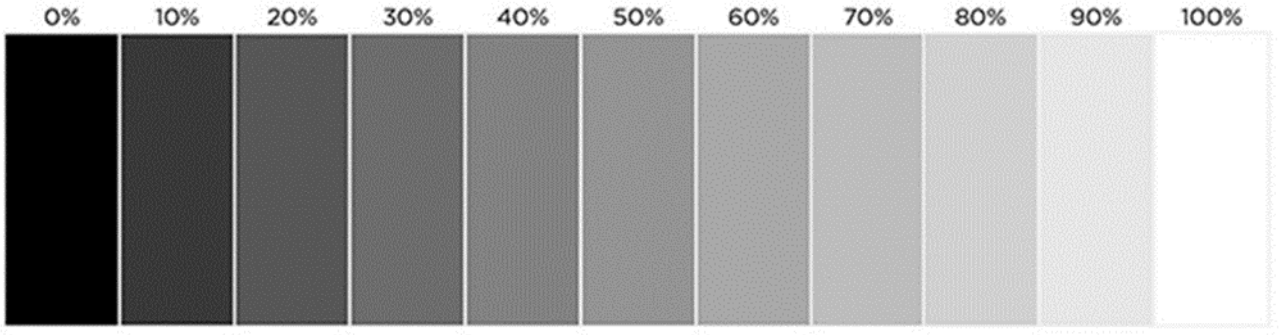
Mätmetod: Kährs L-värde-> beräkning y-värde
Measurement method: Kährs L-value-> calculation y-value

STDAV-standardavvikelse: LRV-ljusreflektionsvärdena som visas ovan är resultaten av testning, men på grund av den naturliga variationen i trä kommer det att finnas någon avvikelse från dessa testvärden. Standardavvikelse är en statistisk term som används för att mäta variationens variation runt ett genomsnitt.

Kährs Group

STDev -Standard Deviation: LRV light reflectance values shown above are the results of testing, however, due to the natural variation in wood there will be some deviation from these test values. Standard deviation is a statistical term used to measure the amount of variability around an average.

Light Reflectance Value - LRV
Reflektionsvärde – LRV



Light Reflectance Value scale

The current guidance in the Regulations and in Codes of Practice, BS 8300:2009, is that adequate visual contrast is provided if the Luminous Reflectance Factor - Light Reflectance Values (LRV) of the contrasting areas differ by at least 30 points. The current British Standard for the measurement of LRV is BS8493:2008+A1:2010.

Y - Luminous Reflectance factor

The luminous reflectance factor Y, is the physical value of the quantity of light energy reflected by a surface, expressed as the percentage of light reflected under the same conditions by a perfect reflecting diffuser. Y, is based on a scale of 0 to 100, where zero = black and therefore represents total light absorption and white = 100 and therefore total light reflection. The CIE model capitalizes on this fact by defining *Y* as luminance.

LIGHT REFLECTIVE VALUE (LRV) The Equality Act 2010 (UK) (which replaced the 2004 Disability Discrimination Act) requires that all new and refurbished public buildings and work places comply with current regulations via their 'Access Statement', ensuring safe entry, exit and safe passage throughout the building. Obligations regarding building access and usage are covered under BS8300 / Building Regulations Approved Document. Failure to comply with the Equality Act could result in building owners and facility managers being fined up to £50,000.

How does it affect finishes? The regulations mean that people, regardless of disability, age or gender, must be able to gain equal access to public buildings. For visually impaired people this means amongst other things that there must be a good visual contrast between various elements of the building, including doorways, fixtures and fittings. Therefore, the contrast between for example doors and walls must achieve a certain level – measured by something called Light Reflectance Value (LRV).

What is Light Reflectance Value? LRV is a universal value for 'contrast'. It measures the proportion of useful light reflected by a colored object. It represents a relative light and darkness value rather than an actual color. Therefore, dissimilar colors could have the same LRV. LRV is measured on a scale of 0 to 100, 0 being perfect absorbing black and 100 being perfect reflecting white (in reality you never find these perfect objects - a bright white would typically have a result of an LRV of 85)

Why do we need Contrast? Most registered blind people will still have some vision in color. Only a small percentage (less than 5%) can see nothing at all, and even people within this group will generally have some sensitivity to light and shade. Ensuring that a minimum of 30 points of LRV difference is specified for adjacent surfaces will in the majority of cases help to ensure that visually impaired people are not discriminated against.
Examples where visual contrast will be required:
- Door faces and/or frames to walls
- Floors to Walls