

# DIN EN ISO 28803:2012-06 (E)

## Ergonomics of the physical environment - Application of international standards to people with special requirements (ISO 28803:2012)

---

<b>Contents</b>		<b>Page</b>
Foreword .....		3
Introduction .....		4
1	Scope .....	5
2	Normative references .....	5
3	Terms and definitions .....	5
4	General factors requiring consideration when designing or evaluating environments for people with special requirements .....	6
5	Considerations related to design and evaluation of the thermal environment .....	7
5.1	Factors requiring special consideration for design and evaluation .....	7
5.2	Moderate thermal environments and people with special requirements .....	8
5.3	Hot environments and people with special requirements .....	9
5.4	Cold environments and people with special requirements .....	10
5.5	Supporting standards for evaluation of thermal environments .....	10
5.6	Thermal disabilities .....	11
6	Considerations related to design and evaluation of the acoustic environment .....	13
6.1	General factors requiring consideration when designing and evaluating environments for people with special requirements .....	13
6.2	ISO 7731, Ergonomics -- Danger signals for public and work areas -- Auditory danger signals .....	15
6.3	ISO 11429, Ergonomics -- System of auditory and visual danger and information signals ..	16
6.4	ISO 9355-2, Ergonomic requirements for the design of displays and control actuators -- Part 2: Displays .....	16
6.5	ISO 9921, Ergonomics -- Assessment of speech communication .....	16
6.6	IEC 60268-16, Sound system equipment -- Part 16: Objective rating of speech intelligibility by speech transmission index .....	17
7	Assessment of visual and lighting environments .....	17
7.1	General .....	17
7.2	Contrast sensitivity .....	18
7.3	ISO 8995, Lighting of indoor work places .....	18
7.4	Lighting for older people .....	18
8	Considerations related to air quality .....	18
9	Considerations related to assessment of other environmental components .....	19
9.1	General .....	19
9.2	Vibration environments .....	19
9.3	Interaction of environmental components .....	20
10	Environmental design and adaptive opportunity .....	20
Bibliography .....		22