

ISO/TR 19815:2018-07 (E)

Information and documentation - Management of the environmental conditions for archive and library collections

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	1
4	General	6
5	Management of environment for optimization of preservation and sustainability	8
6	Temperature	10
7	Relative humidity	11
8	Climate and its consequences for collections	13
8.1	General	13
8.2	Seasonal climates	15
9	Insects and other pests	15
10	Pollution	15
11	Light	16
12	Setting a temperature and relative humidity specification	18
13	Psychrometrics	22
14	Good practices for sustainability	27
14.1	General	27
14.2	Arnamagnæan Institute archive, Copenhagen, Denmark	28
14.3	Territorial archives, St Martin, West Indies	28
14.4	Japanese Imperial Archives, Tokyo	28
14.5	Jersey Archive, Jersey, Channel Islands	28
14.6	Norwegian National Library, Mo i Rana	29
14.7	Central State Archive of Saxony, Dresden, Germany	29
14.8	National Library of Singapore	29
14.9	Archives départementales du Nord, Lille, France	29
14.10	School library, Gando, Burkina Faso	29
15	Educational and assessment tools	29
15.1	General	29
15.1.1	Overview	29
15.1.2	Isoperm	30
15.1.3	Preservation index (PI) and time weighted preservation index (TWPI)	30
15.2	Environmental management tools and assessments	31
15.2.1	General	31

15.2.2	Fundamental microclimate concepts	31
15.2.3	Air exchange between an enclosure and its surroundings	31
15.2.4	Calculator for atmospheric moisture	32
15.2.5	Calculator for energy use in museums	32
15.2.6	Calculator for conservation heating	32
15.2.7	Calculator for dehumidification energy load	32
Annex A (informative) Energy economy		33
Annex B (informative) Impact of temperature		38
Annex C (informative) Impact of relative humidity		40
Annex D (informative) Material damage associated with temperature and relative humidity		43
Annex E (informative) Sources of pollutants and their impact on materials significant to archive or library collections		46
Annex F (informative) Interactions between temperature, RH, light and pollution		50
Bibliography		51