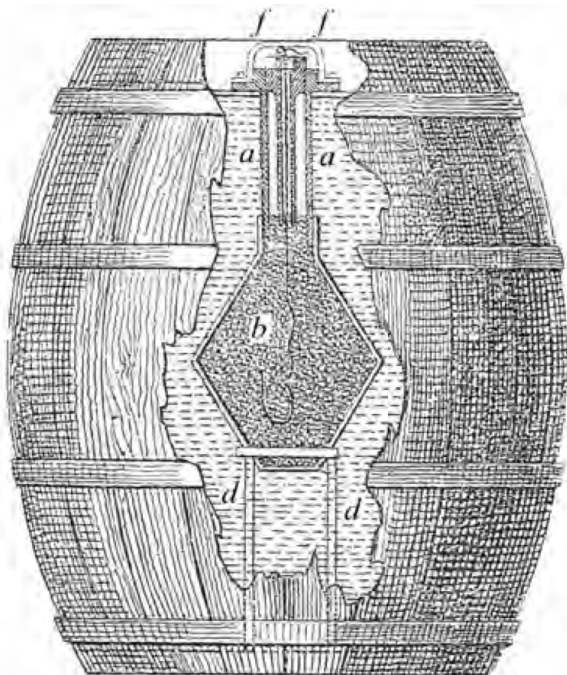


Fire Risk Assessment and Fire Engineering in Historic Buildings: Chronological Bibliographic List

Selected List of Published Guidance on Fire Loss to the Built Heritage:
Compiled by Ingval Maxwell

(All URL's correct to 15 March 2020)



*Fire-extinguishing barrel,
Augsburg, 1751.*

f fuse
a watertight pipe for fuse
b container for gunpowder
d water

1751 German Fire Extinguishing Barrel

After the fuse was lit, the barrel was 'tossed' into the room that was on fire where the core, containing gunpowder, exploded to expel the surrounding water to create a water mist extinguishing effect!!

Published Guidance from 1995 to 2019

Since the mid 18th C technology and techniques have greatly developed and there is no shortage of freely available and relevant downloadable on-line guidance and advice aimed at stemming the loss of the built heritage to the effects of fire.

Heritage Under Fire. A guide to the protection of historic buildings. FPA 2nd Edition. 1995

This edition contains a wide range of information and advice in an easily accessible form that incorporates guidance and suggestions from the Bailey inquiry into the Windsor Castle fire. Virtually all essential elements of knowledge required to effect a fire safety programme for a wide range of heritage buildings are presented.

112 pp PDF Download

<https://www.tcd.ie/estatesandfacilities/assets/pdf/HeritageUnderFire.pdf>

Fire Protection and the Built Environment: 1998 Conference Proceedings: 1999

The Proceedings covering fire legislation; insurance; salvage; risk assessment; implementation of fire protection measures; sprinkler installation and fire management in historic buildings in the UK and Europe.

88 pp PDF Download

<https://issuu.com/hspubs/docs/cp---fire-protection-and-the-built-heritage/3?e=2353969/12099331>

Can we learn from the heritage lost in a fire? Experiences and practises on the fire protection of historic buildings in Finland, Norway and Sweden. 2004

The Nordic publication consists of three themes: case studies, fire protection and actions after a fire, in addition to presenting general information and aspects of preventing a fire in historic wooden towns, together with an essay concerning the problems of rebuilding after a fire. The Appendices include a checklist on the contents of a rescue plan.

80 pp PDF Download

<https://www.raa.se/app/uploads/2014/02/Can-we-learn-from-the-heritage-lost-in-a-fire.pdf>

Manual Fire Extinguishing Equipment for Protection of Heritage, 2006

This Nordic report provides an examination of available firefighting equipment and techniques for museum staff to use in the early stages of a fire. Six categories of handheld extinguishers, three techniques for fighting fire without extinguishers and nine automatic small extinguishers for use in museums, galleries or historical buildings have been evaluated in terms of ease of use, extinguishing efficiency, secondary damage, maintenance and cost.

62 pp PDF Download

<http://www.fireriskheritage.net/wp-content/uploads/ManualFireExtinguishingEquipment1.pdf>

Minimum Invasive Fire Detection for Protection of Heritage. 2006

A summary of technologies used for minimizing invasive detector installations is offered, the results evaluated, and recommendations given. Some tests were made to find the optimum solutions for the highly valued Stave churches of Norway. Other projects and tests investigated the area fire surveillance of historic town centres and multiple building heritage locations.

40 pp PDF Download

<http://www.fireriskheritage.net/wp-content/uploads/MinimumInvasiveFireDetection.pdf>

Fire Risk Assessment Sleeping Accommodation: 2006

This guide applies to England and Wales. It does not set prescriptive standards, but provides recommendations and guidance for use when assessing the adequacy of fire precautions in premises providing sleeping accommodation. The guide also provides recommendations for the fire safety management of the premises.

2006: 144pp PDF Download

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/422192/9281_Sleeping_Accommodation_v2.pdf

Guide for Practitioners 6: Conversion of Traditional Buildings Parts 1 + 2: 2007

The Guide is specifically concerned with the conversion of Scotland's traditionally constructed built heritage. It was prepared to provide those involved with their design, development and rehabilitation with relevant information on the application of Building Standards.

Part 1 PDF pp78,

Part 2 PDF pp 170 PDF Downloads

<https://issuu.com/hspubs/docs/conversion-of-traditional-buildings>

Cost Action C17 Built Heritage: Fire Loss to Historic Buildings: 2002-2008

This Cooperation in the field of Scientific and Technical Research programme (COST) was a European wide initiative which, through mutual collaboration, aimed to reduce the significant physical and cultural loss of Europe's built heritage to the damaging effects of fire. Involving a wide range of experts from 20 countries, the Action was achieved in a multidisciplinary, multi-national manner through the collaboration and integration of a variety of related research and practical projects. The 4-year programme, initiated in December 2002, concluded with its final report and associated documents being published in 2008.

This work remains the most comprehensive international study of fire loss to historic buildings to date. COST Action C17 Index to Associated Publications. 2008
<http://www.fireriskheritage.net/wp-content/uploads/CDbooklet.pdf>

English Heritage Fire Safety in Historic Town Centres. 2008

[https://www.frsug.org/reports/Fire Safety in Historic Town Centres.pdf](https://www.frsug.org/reports/Fire_Safety_in_Historic_Town_Centres.pdf)

IRMP Steering Group Integrated Risk Management Planning: IRMP Policy Guidance: Protection of Heritage Buildings and Structures: DCLG, 2008

The document is intended to guide the preparation of an IRMP strategy for Heritage Protection. Its purpose is to assist the FRS in understanding the scope of heritage considerations in the IRMP process by undertaking risk analysis, developing response and prevention strategies, developing delivery mechanisms and to monitor, review and evaluate such activity.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/7639/940468.pdf

Fire Protection of Historic Streetscapes: 2009

The purpose of this American report is to provide the National Association of State Fire Marshals (NASFM), with recommendations on how to address the fire risks in historic buildings located in main street areas in line with their primary mission of protecting life, property, and the environment from fire.

117 pp PDF Download

<https://web.wpi.edu/Pubs/E-project/Available/E-project-121609-224643/unrestricted/NASFMfinalreport2009.pdf>

Fire Detection & Suppression for Buildings in Historic Districts: 2009

Fire is one of the most serious threats to a building, with consequences that can include harm to occupants and firefighters, damage to the structure and its contents, loss of building use, visual harm to the streetscape, and impact on the tax base. A comprehensive fire safety program that includes fire prevention and fire resistance features is needed to reduce the ignition and fire spread potential is promoted to American audiences.

16 pp PDF Download

<https://bellefonte.net/wp-content/uploads/2009/05/Fire-Grant.pdf>

Guide for Practitioners 7 - Fire Safety Management in Traditional Buildings

Parts 1 + 2: 2010

The Guide offers the identification and assessment of fire risk, and includes advice on its management and appropriate technology consistent with accepted conservation principles, and an overview of legislation.

Part 1 Principles and Practice' 84pp

Part 2 Technical Applications and Management Solutions' 194pp PDF Downloads

<https://www.engineshed.org/publications/publication/?publicationId=7300097e-415f-4d27-a5fe-a5ad00ab8501>

The Building Regulations 2010: Fire safety Approved Document Volume 2 - Buildings other than Dwelling houses B. 2010

<https://www.nsm ltd.co.uk/wp-content/uploads/2019/01/3.-Building-Regs-Part-B-Fire-Safety.pdf>

BS 5306-0:2011: Fire protection installations and equipment on premises. Guide for selection of installed systems and other fire equipment: 2011

This part of BS 5306 gives guidance on the selection, use and application of automatic water sprinkler, water spray, watermist, gaseous, foam and powder fire-fighting systems and hypoxic air fire-prevention systems. It also gives guidance on installed equipment for fire and rescue service use, and on the application of portable fire extinguishers.

BSI Shop: To purchase (at £234 !!!!) from:

<http://shop.bsigroup.com/ProductDetail/?pid=00000000030182749>

Managing fire safety in historical buildings CFPA-Europe Guideline No 30: 2013

The proposals within the CFPA guidelines were produced by the Slovenian Fire Protection Association on the basis of many documents and studies, resulting from COST Action C17: Built Heritage: Fire Loss to Historic Buildings. Working Group 4 of this programme worked on property management strategies and has produced excellent practice guidelines.

<http://cfpa-e.eu/wp-content/uploads/files/guidelines/CFPA E Guideline No 30 2013 F.pdf>

INFORM: Fire Safety in the Home: 2014

This INFORM guide provides an introduction to the factors which can create a fire risk in a historic property. Different techniques for preventing the start and spread of fire are briefly considered.

2014: 8pp PDF Download

<https://www.engineshed.org/publications/publication/?publicationId=76336331-cee7-46b8-bcc5-a59500e8d911>

Managing Change in the Historic Environment: Fire Safety Management: 2015

Managing Change is a series of non-statutory guidance notes about handling change in the historic environment. They explain how to apply Scottish Government policies. This guidance note sets out the principles that apply to fire safety management in historic buildings.

2015: Historic Scotland pp18 PDF Download

<https://www.historicenvironment.scot/archives-and-research/publications/publication/?publicationId=6e0bcac9-5aa2-4517-9d59-a60a010497e6>

Fire and Flood in the Built Environment: Keeping the Threat at Bay. Part 1: Fire. 2015

COTAC's 2014 Annual Conference was entitled "Fire and Flood in the Built Environment: Keeping the Threat at Bay" and this report builds upon the information and advice that was freely offered by the speakers. It aims to relate the presentations, and discussion outcomes, to emerging thoughts on the impact of fire when creating a Building Information Modelling for Conservation (BIM4C) initiative.

30 pp PDF Download

<http://cotac.global/resources/BIM4C+Disaster-Fire-Pt1.pdf>

Guide for Practitioners 6 - Conversion of Traditional Buildings – Part 1 and 2. 2016

This guide is specifically concerned with the conversion of Scotland's traditionally constructed built heritage. It has been prepared to provide those involved with its design, development and rehabilitation with relevant information of the application of the Scottish Building Standards.

68 pp PDF Download

<https://issuu.com/hspubs/docs/conversion-of-traditional-buildings>

Fire Safety for Traditional Church Buildings of Small and Medium Size. 2017

This guide is intended for churches with congregations of up to 300, to help decide if any fire safety improvements are necessary to protect them, and what improvements can be made to give added protection to the building.

48 pp PDF Download

<https://historicengland.org.uk/images-books/publications/fire-safety-for-traditional-church-buildings/>

Fire Prevention in Thatched Homes. 2017

Old properties with deep thatch, particularly those constructed pre-1960, are incompatible with the installation of modern wood burning stoves particularly in traditional chimney breasts.

8 pp PDF Download

<https://www.nsmtltd.co.uk/wp-content/uploads/2019/01/3.-Fire-Prevention-in-Thatched-Properties-Advice-Notes-to-Download.pdf>

NFPA 909, Code for the Protection of Cultural Resources - Museums, Libraries, and Places of Worship. 2017 (To purchase from:)

<https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=909>

NFPA 914, Code for Fire Protection of Historic Structures. 2019 (To purchase from:)

<https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=914>

Heritage Advice Letter: LFB To Whom It May Concern. 2019

Following the Notre Dame fire incident, and emphasising that it is a legal requirement to have a fire risk assessment, this updated letter of advice from London Fire Brigade is intended for individuals who live and/or work within buildings that have a historic significance. It also attaches LFB Guidance Note 80 Heritage and Buildings of Special Interest (see below).

3 pp PDF Download

<https://www.london-fire.gov.uk/media/3696/heritage-advice-letter.pdf>

London Fire Brigade Fire Safety Guidance Note 80 (GN80) Heritage Buildings of Special Interest: 2019

This Guidance Note provides information on historic buildings and the damage control / salvage of artefacts and collections and is one of a series produced by the LFB Commissioner to provide advice on various aspects of fire safety

18 pp PDF Download

<https://www.london-fire.gov.uk/about-us/what-we-do/protecting-historical-buildings-and-heritage-in-london/>

Fire Safety Risk Assessment – Checklist of 5 key steps: n/d

Following the 5 key steps whilst filling in the checklist can help create a Fire Risk Assessment, although additional information would be required for large or complex premises.

1 pp PDF Download

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/14899/fsra-5-step-checklist.pdf

Guide to Fire Fighting in Thatched Buildings (Institution of Fire Engineers Special Interest Group for Heritage Buildings). n/d

Fires in thatch roofs pose a special challenge to fire fighters; it may involve a rapidly spreading fire which requires simultaneous application of water, removal of thatch whilst working at height and undertaking salvage operations.

17 pp PDF Download

<https://portal.ifehosting.org.uk/Portals/0/SIGs/Heritage%20SIG%20firefighting%20in%20thatched%20buildings%20document.pdf?ver=2019-04-18-085058-183>

Fire Safety in Historic Buildings: (US) National Trust for Historic Preservation. n/d

When historic buildings were first occupied, the users were more familiar with the risks of fire; their methods of cooking, heating, and lighting, which all involved the use of open flame, were a constant visual and tactile reminder. With today's standards of comfort and convenience we expect far more of our buildings, and our needs are so conveniently supplied with concealed mechanical and electrical services that we are left virtually unaware of their fire potential.

21 pp PDF Download

<https://intoorg.org/wp-content/uploads/2015/09/2B27.FireSafetyInHistBldgs.pdf>

Fire Spread Video: n/d

Sprinklers play a positive role in reducing the human impact and economic and environmental cost of fire in any building that they are installed in. The video explains their benefits.

<http://www.london-fire.gov.uk/sprinklers.asp>

<https://www.youtube.com/watch?v=nGg10KaNhrq&feature=youtu.be>

Fire safety in the Workplace: n/d

A responsible person must carry out and regularly review a fire risk assessment of the premises. This approach identifies what needs to be done to prevent fire and keep people safe.

<https://www.gov.uk/workplace-fire-safety-your-responsibilities/fire-risk-assessments>