



### НОВЫЙ СТАНДАРТ

## «МУЗЕИ ОТОПЛЕНИЕ, ВЕНТИЛЯЦИЯ, КОНДИЦИОНИРОВАНИЕ ВОЗДУХА»

МАРИАННА БРОДАЧ, ВИЦЕ-ПРЕЗИДЕНТ НП «АВОК», ПРОФЕССОР МАРНИ

«Настоящий стандарт распространяется на системы отопления, вентиляции и кондиционирования воздуха, расположенные во вновь возводимых, реставрируемых и реконструируемых зданиях музеев и музейных комплексах и в помещениях музеев в зданиях иного назначения, содержит требования по их проектированию, базовые схемы для систем отопления, тепло- и холодообеспечения, противопожарные требования к системам противопожарной вентиляции, а также требования к применяемому оборудованию, материалам и системам управления (автоматизации инженерных систем). Настоящий стандарт разработан в развитие положений СП 60.13330.2016 «Отопление, вентиляция и кондиционирование воздуха»»

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## РЕНОВАЦИЯ СМИТСОНОВСКОГО МУЗЕЯ

СОХРАНЕНИЕ ИСТОРИЧЕСКОГО НАСЛЕДИЯ ПУТЕМ  
РАЦИОНАЛЬНОГО ИСПОЛЬЗОВАНИЯ ЭНЕРГОРЕСУРСОВ

Галерея Ренвика стала ярким примером устойчивого сохранения исторических памятников культуры и городской среде. Здание было спасено в 1960-х годах от сноса, а его реконструкция позволила повысить эффективность использования энергоресурсов при одновременном улучшении качества микроклимата помещений, обеспечивающего сохранность демонстрируемых экспонатов.

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## СИНГАПУР

ОПЫТ ПРОЕКТИРОВАНИЯ  
И СТРОИТЕЛЬСТВА ВЫСОТНОГО ЖИЛЬЯ

ЕЛЕНА ГЕНЕРАЛОВА, ВИКТОР ГЕНЕРАЛОВ

Сингапур – столица одноименного государства, которая является одним из самых крупных финансовых и туристических центров Азии. Республика Сингапур, город-государство в Юго-Восточной Азии, входит в состав Содружества, которое возглавляет Великобритания. Рассказываем о достижениях Сингапура в жилищном строительстве!

\* В строительстве страны 60 лет государство, с помощью государственной системы и административных подкрепленных действий, систем, созданных на основе философии Восточного восточного и западного. Сингапур. Опыт проектирования и строительства высотного жилья.

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## The new standard «Museums. Heating, ventilation and air conditioning».

p. 8

**Marianna Brodach**

Specialists of NP «ABOK», who have extensive experience in the development of regulatory documents, are introducing a new standard that has no analogues «Museums. Heating, ventilation and air conditioning», taking into account the specificity of museum buildings and the need to preserve museum collections and museum funds by creating and maintaining the necessary microclimate parameters for these purposes.

## The Renwick Gallery of the Smithsonian American Art Museum

p. 14

**Roger Chang**

Home to the Smithsonian American Art Museum's arts and crafts program since 1972, the Renwick Gallery was built in 1859 as the original Corcoran Gallery of Art. It is a principal structure in the Smithsonian Institution portfolio, based on the era of construction and its historic significance as the first purpose-built art museum in America.

The building was originally designed by James Renwick, Jr., the architect of the Smithsonian's "Castle" and St. Patrick's Cathedral in New York City. It is often referred to as the American Louvre, with many similarities to the Second Empire Style Tuileries Gallery of the Louvre in France. The building was at risk of being demolished in the 1960s to make room for a new government facility. First Lady Jacqueline Kennedy led a successful campaign to bring new stewardship to the facility, including a modernization to restore the building's use as a museum.

## Experience in designing and building high-yield housing in Singapore

p. 26

**Elena Generalova, Viktor Generalov**

By population density, which is more than 7 000 people per 1 km<sup>2</sup>, this is the second country in the world. At the same time, the distribution of the population across the territory is extremely uneven, the most populated is the southern part of the island, where two-thirds of the total population of the republic is concentrated. Therefore, when solving the housing problem in Singapore, emphasis was placed on high-rise buildings both by microdistricts and residential complexes.



## A new skyscraper on an old foundation. Experience of London 22 Bishopsgate

p. 40

Andrei Shelekhov

Skyscraper 22 Bishopsgate in the business district of the British capital has not yet been completed, but has already earned the title of the first «vertical village» in London. What peculiarities did designers face of an unusual building and how they managed to reduce the cost of project development and reduce the simulation time by 40%?

## Opinion of experts

p. 44

On April 19, 2018, the RF Government issued Order No. 703-r on approval of the Comprehensive Plan of Measures to Improve the Energy Efficiency of the Russian Federation's Economy. The magazine «Sustainable Building Technologies» invited business representatives to discuss both the target indicators of the Plan and its individual activities.

## Engineering equipment of hybrid buildings

p. 48

Yu.S. Pushkin; V.V. Kiselev

The article considers the option of building an energy efficient building using the example of a public hybrid building. The project solution is presented, as well as the prospects for the development of engineering equipment of buildings based on the use of environmentally friendly renewable energy sources.

## The concept of engineering equipment in the era of the new digital nature.

p. 56

Popovich M.I., Stamenkovich M.Z., Cheban A.N

This article explores the emergence of a new «digital nature», the impact on society's life, architecture, the transition to a new way of life and integration of digital technologies in engineering systems.

## Conference ABOK - «Sustainable Building Technologies»

p. 64

April 19, 2018 is traditionally part of the business program of the international exhibition Aquatherm St. Petersburg Conference ABOK «Sustainable Building Technologies». The conference brought together 185 specialists from 16 cities of Russia and abroad.