Preface

The proliferation of microorganisms in buildings has an enormous aesthetic, health and economic impact. However, to date few studies have highlighted the possible worsening of this problem in relation to the construction methods of “Nearly Zero Energy Buildings”.

This brief book wants to give a small original contribution to putting emphasis on this topic, in an attempt to raise public awareness towards a way of constructing buildings which is not just energy efficient (toward “Nearly Zero Energy”) but which is also sustainable, safe and provides high living quality for building occupants.

Research on these topics is very broad and multidisciplinary: it involves aspects of microbiology for the classification of the main infesting organisms, building physics issues related to the environmental conditions for the proliferation, aspects of materials engineering with regard to the biodeterioration of materials and remedial actions, medicine for what concerns the consequences for human health. The preparation of the book has therefore been made possible thanks to the collaboration of experts in these different fields.

This will be just a starting point for further investigation, so that building construction of the future not only focuses on energy efficiency but also on the quality of life of the inhabitants.
Nearly Zero Energy Buildings and Proliferation of Microorganisms
A Current Issue for Highly Insulated and Airtight Building Envelopes
Di Giuseppe, E.
2013, X, 94 p. 26 illus., 15 illus. in color., Softcover
ISBN: 978-3-319-02355-7