Laboratory Report:

**BUILDING MATERIALS**

Exercise nr **…**

**Exercise title**

Date of exercise: ……………………

|  |
| --- |
| Team **nr …**,: |
| 1. Name, surname | ………………………………………………………… |
| 2. Name, surname | ………………………………………………………… |
| 3. Name, surname | ………………………………………………………… |
| 4. Name, surname | ………………………………………………………… |
|  | *(signature)* |

|  |  |  |
| --- | --- | --- |
| Group: | Semester: | Academic year: |
| **…………… NST/ST** | **………………** | **………………** |
| **Grade:** | **Notes:** |

Content

[1. Information about editing a report 3](#_Toc286235261)

[1.1. Subchapters 3](#_Toc286235262)

[1.2. Equations and mathematical formulas 3](#_Toc286235263)

[1.3. Tables and figures 4](#_Toc286235264)

[1.4. Literature 5](#_Toc286235265)

[2. Lab report content 5](#_Toc286235266)

# Information about editing a report

Text should be prepared using the font 12pti. Leading (line spacing) should be 1,5 line. All margins should be 2.5 cm. Text justify. The header should contain a number of practical exercises and the names of the authors. The report should not include more than 10 pages in this format.

## Subchapters

The text should be divided into chapters, and, if necessary, on the sections (up to the second degree). Titles of chapters and subchapters highlight using bold font 12pti. The chapters also highlight in small caps.

## Equations and mathematical formulas

Equations and mathematical formulas should be edited in the Editor equations (for MS Word: the Insert → Object → Microsoft Equation 3.0); less complex designs can be edited by using the appropriate symbol and indexes. You should illustrate the elements of the equations (below the equation), for each element give the units. Here are examples of equations for apparent density saved using Equation Editor (1.1) and without the use of Equation Editor (1.2) and (1.3), although with more complex formulas, it is advisable to use the editor.

 (1.1)

where: ρ – apparent density of the sample, g/cm3,

m – sample mass, g,

V – sample volume, cm3.

Alternative equation format (without the use of Equation Editor):

ρ = m / V (1.2)

or

ρ = m · V-1 (1.3)

Equations and formulas should be numbered to other parts of the report can be recall. Equations are numbered that the first number indicates the chapter number, while the second (after the dot) means a sequence model set out in this chapter (regardless of the subchapters), e.g. equation (1.1) is the first equation in chapter first, equation (2.15) means the fifteenth equation in the second chapter, etc.

## Tables and figures

Tables and figures should numbered. Tables should be over- and figures undersigned. Descriptions of tables and figures should be made using the font 11pti. Tables and figures are numbered in the same way as the equations (see Chapter 1.2) but independently of each other, i.e. separate tables and figures. Tables and figures should be cited in the text in the appropriate place using appropriate shortcuts. The following are examples of a table (tab. 1.1) and a figure (fig. 1.1). The data summarized in tables should be of appropriate accuracy (the appropriate number of decimal places), the values should be described, marked with symbols, and units. Figures, should be clearly described (e.g., the titles for axes of the chart, as well as units).

Table 1.1. Example of table

|  |  |  |  |
| --- | --- | --- | --- |
| No | Column description | Density | Density |
| ρ1 [g/cm3] | ρ2 [kg/m3] |
| 1 | First line | 1,00 | 1000 |
| 2 | Second line | 1,50 | 1500 |
| … | Line description | 2,55 | 2500 |
| n | n-Line description | 11,04 | 11040 |



Figure 1.1. Example of figure 1: Realtion „udział zniszczenia typu adhezyjnego” vs. roughnes parameter, RS [1].



Figure 1.2. Example of figure 2: Concrete texture after scarification [1].

## Literature

In the case of the use of text, figures, tables, or a photos from literature or internet source give the reference in the descriptions of the tables, drawings and photographs. The references, we give the text in square brackets, e.g. [1] in order of citation. References are also standards, technical approvals and instructions for the ITB. We also considered as references information contained on the website – in this case the address of the page that the cited information, tables, drawings or photographs. If the picture or photograph is made by reporting team, then give the brackets type [author]. References should be compiled at the end of the report in a chapter entitled "Reference", in accordance with the following:

**Reference**

1. Czarnecki, L., Garbacz, A., Kostana, K., *Wpływ stopnia rozwinięcia powierzchni betonu na kształtowanie przyczepności w złączach naprawianych*, Mat. XIII Konferencji Naukowo-Technicznej „Trwałość Budowli i Ochrona przed Korozja – Kontra 2002”, Zakopane 2002, 21-28
2. <http://www.mmfx.com> MMFX Technologies Corporation

# Lab report content

Lab report should contain following points:

1. Contents
2. The main goal
3. Theoretical and practical part description
4. Results and calculations
5. Conclusions
6. Appendixes
7. Reference

According to the specificities of the practical exercises, the reports may vary between and contain additional points.