chapter #..... title…. [example of style ‘Title’… add chapter number and tile]

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# word count chapter: 3558 words [it includes references section]

# summary [example of style ‘Heading 1’]

This document presents the structural template and formatting instructions for authors preparing to submit a chapter for the book: **Lean Construction 4.0: Driving a Digital Revolution of Production Management in the AEC Industry**. Using the template and following these instructions is mandatory as per the guidelines of the publisher, Taylor and Francis. To ensure that your chapter will conform to the required formatting, save this file with your chapter’s title, and then write your text directly into it, erasing the contents as you go. [example of style ‘Text First’ for the first paragraph]

Structuring chapters according to this template will help authors report clearly on their work. Correct formatting (e.g., using and maintaining the styles without defining your own styles) will aid the editors in producing a homogenously formatted book. [example of ‘Text Running’ for each subsequent paragraph]

The instructions presented here have been adopted to format this chapter. After you have formatted you’re your chapter accordingly and applied the Microsoft Word ‘styles’ herein defined, your submission should have the same look as this document. To access the styles in word using the draft mode, please follow the following: open file, then options, then advanced, scroll down to display, then under “the style area pane width in draft and outlines views” enter 1 inch. This will show the word styles in your document when you press the draft mode under “view” in word. Please observe that some of the styles mentioned here may have different names in your version of Word.

# Keywords

Lean construction 4.0, template, formatting, instructions, references, general style.

# Introduction

The default language for this book is American English. Please be consistent with its use across the chapter. In addition, Appendix I indicates the ‘General Style’ guidelines that must be followed in the making of the chapter. Therefore, we ensure formatting consistency across chapter in the book.

# Structural Template

## Document Structure [example of style ‘heading 2’]

Chapters should be at most 7000 words, including the title page, tables and figure captions, body of the chapter, and references. Provide word count of your chapter. Provide on the first page the chapter’s title (at most 90 characters, including white spaces), author(s) name(s), abstract (up to 150 words), and keywords. Please spell ‘keywords’ as one word. Provide up to 5 keywords for your chapter.

As shown above, provide each author’s full name, professional title, affiliation, ORCID ID, and email address. ORCID IDs are mandatory, please open an account on ORCID if you do not have one already.

Most chapters will start with an introduction and end with conclusions. The introduction should start immediately following the keywords (on the first page if possible). The conclusions must be followed by acknowledgments, if any, and then references.

## References

The references should be formatted according to the APA referencing style <https://www.mendeley.com/guides/apa-citation-guide>. The References section must include all work cited in the chapter, sorted in alphabetical order by author(s).

Book and journal titles should always be in italics, regardless of which style guide you are following.

* Please include DOIs (Digital Object Identifiers) for all publications you reference (including books) where available, this guarantees that others will be able to easily locate and access your listed references.
* Please ensure you check that the date for each entry in the reference list/bibliography matches the date cited in the text reference. This will avoid time-consuming queries at copy-editing stage.

Example references are provided in the References section of this document and some are cited in the following text. The proceedings of the first three IGLC conferences were compiled into a book, edited by Alarcon (1997). Valuable knowledge can also be found in doctoral dissertations (e.g., Martinez 1996), technical reports (e.g., Tommelein and Ballard 1997) and, of course, journal papers (e.g., Howell, Laufer, & Ballard, 1993; Tommelein 1998; Tommelein, Riley, & Howell, 1999)

## Different Types of Chapters

Some authors will write chapters on situations, observations, and findings that are practice-based or experimental in nature or are based on hypothesis testing. We ask that authors of such chapters to clearly describe:

* What hypotheses are tested in the work? [example of ‘List Bullet’]
* What evidence is provided that was used to test the hypotheses?
* Whether or not the work enabled you to draw conclusions about the hypotheses, or further work is needed?

In contrast, other authors will write chapters that are more opinion-based or theoretical in nature. We ask that authors of such chapters clearly describe: [example of ‘Text First’ that follows ‘List Bullet’]

* What are the foundational elements of the theory you are basing your work on?
* What are your hypotheses and background assumptions?
* What seems to be true based on the theory?
* How could the theory be tested through experimentation?

Moreover, some chapters will report on constructive research (also called design science research). Characteristically, this kind of research pertains to creating and testing an artefact. We ask that authors of such chapters clearly describe:

* What practical problem is being addressed?
* What is the design and construction process of the artefact?
* How is the artefact evaluated?

All authors should:

* Describe the value of their work for practitioners as well as scholars.
* State the limitations of the presented work.
* Propose questions or hypotheses for future work, to be done by themselves or others, and suggest how these may be tested.

# Formatting Requirements

## Font and Formula

Please note that we are not permitted to accept separate font files. If your manuscript contains special characters (e.g. Chinese, Japanese, Hebrew, Arabic, Greek, Cyrillic, characters not generally used in Western European languages, symbols, mathematics, IPA characters, etc.) then you should also submit a PDF version of your manuscript and list the special fonts used.

Pay attention to mathematical formulas format. If a very simple formula or equation is needed in your manuscript then it can be inserted into the body text, but you should use the proper mathematical characters. Word processing packages normally allow you to insert symbol characters, or alternatively you can use the Windows ‘Character Map’ to find and select the character you wish.

In other words, please use; × (multiplication sign) instead of the letter ‘X’, − (minus sign) instead of a hyphen, etc., and use standard mathematical notational style, i.e. italic for variables, roman for constants, bold for vectors and matrices, etc. It is fine to use a solidus (/) rather than a division sign, with parentheses if necessary to avoid ambiguity (e.g. ‘1/(*n*+1)’). Fuller formulae or equations should be displayed (inserted on a separate line). If you are working in Word, it is best to insert these using the equation editor. Note that a solidus is not generally used for display formulae or equations – a horizontal line is preferred. Displayed equations should be numbered serially but only if they are referred to in the text. Use the decimal system and number them sequentially by chapter on the right-hand side of the page. For example, if the equation being written is placed in chapter 1, it has to be placed and named as follows:

2*x2* + 7*y* + 8 = 17 (1.1)

## Word Processor

### Document File Type [Example of Style ‘Heading 3’]

Please prepare and submit the final version of your chapter as a Microsoft Word (Word, in short) document (.doc or .docx file extension).

It is therefore important that you submit a Word document, and not a file in .pdf or other file format.

### Page Setup

The page setup of this template shall be used. This includes:

* Page size
* Page rotation
* Page margins
* Header and footer texts

## Styles

‘Styles’ have been defined and are used in this document. Please apply them to format all your text as well. Use only the styles in this template. Do not manually set the font, font size, or other characteristics of any text. Do not alter any style definitions. In Appendix I, “General Style” guidelines are provided and they must be followed in the making of the chapter.

If you are not familiar with styles in Word please take one of the tutorials available online (e.g., Microsoft n.d.) or seek assistance from your organization’s IT support. Learning to use styles and other Word features now will save you a lot of time in future.

### Styles – Headings

The Heading styles are:

* ‘**Title’** is used only for the chapter title
* ‘**Heading 1**’
* **‘Heading 2**’
* **‘Heading 3**’

Please avoid using further subheadings and note, contrary to the text paragraphs that are ‘Justified,’ heading styles are ‘Aligned Text Left’ in order to prevent exaggerated spacing when a heading runs to more than one line.

### Styles – Figures and Tables

Please use font Arial or another sans-serif font in figures and in tables.

To summarize the style specifications for figures and tables:

* **Figures** use style ‘Figure’ with format ‘Paragraph’ then ‘Line and Page Breaks’ set at ‘Keep with next.’
* A **figure caption** is placed below the figure and centered on the page. The style to use is ‘Figure Caption.’
* **Text in tables** should be formatted using the styles ‘Table body’ and ‘Table heading.’
* A **table caption** is placed above the table and centered on the page. The style to use is ‘Table Caption.’
* If possible keep tables to one page. Do not allow rows to break across pages.

### Styles – Body

The Body style specifications are:

* ‘**Authors’** is used (only) for formatting the authors’ names under the title
* **Body text paragraphs** following headings, figures, tables, bullet lists or quotes shall be formatted with the style ‘Text First.’
* **Subsequent paragraphs** following directly after a text paragraph shall be formatted with the style ‘Text Running.’
* **Numbered or bulleted lists** should be formatted with ‘List Bullet.’ The paragraph following a list is in ‘Text First’ format.
* **Footnotes:** do not use footnotes
* **References** at the end of the chapter shall be formatted with the style ‘References.’

### Making Words or Phrases Stand Out

If you wish to make a word or phrase stand out in a paragraph, then use either the style **Strong (bold)** **[example of the character style ‘Strong’]** or the style Emphasis (italic) [example of the character style ‘Emphasis’]. To use these character styles, select the text you wish to make stand out, and then choose and apply the style. In the references, for example, use the style Emphasis for the titles of books and journals.

## Figures, Tables and Floating Boxes

Each figure or table should follow the paragraph in which it is first mentioned. Make sure that each caption for a figure or table fits on the same page as the figure or table it refers to. Figures and tables in the chapter may be in color but please ensure that they are readable in black-and-white.

* Tables and figures should be submitted separately. Please show the location of each table and figure in the text using “insert table x here” or “insert figure x here”, respectively.
* Figures, tables and ‘floating’ boxed text should not be supplied embedded into the manuscript itself but rather supplied as separate files.
* Save each figure/table/box in a separate file and name them by chapter – i.e., For chapter 1, name Figure 1.1, 1.2, 1.n accordingly; For chapter 2, name Table 2.1, 2.2, 2.n accordingly.
* Supply figures in the format in which they were created and at as high a resolution as possible.
* DO NOT use colour (unless specifically discussed and agreed with the Editors). The vast majority of Taylor and Francis books are in black and white – colour will have to be converted to greyscale and any colour differentiation will be lost.
* If you have drawn figures within a separate package provide them in separate files – do not insert them into the Word manuscript.
* Supply tables separately rather than embedded into the manuscript file. However, it is perfectly acceptable (and often easier) to supply the tables grouped together in one file per chapter.
* It is best to format tables as true tables (e.g., using Microsoft Word’s ‘Insert Table’ function) rather than using another method.
* Save each image separately in its own file and in its original application (usually TIFFs or JPEGs for halftones; EPS, Word, Excel or PowerPoint for line art).
* Please advise the Editors, if you specifically want all images to use a consistent font.
* If you have access to such software, line drawings should ideally be saved as greyscale EPS files.
* DO NOT embed your line or halftone images in Word or any other text file package as this affects the quality of the images and we may not be able to use them.
* It is best to supply us with the image in its original format (e.g. Excel or PowerPoint) rather than placing them in a Word document, as Word often downgrades the quality of an image.
* Electronic line artwork is best created using ‘vector’ graphic software such as Illustrator or Freehand. If you provide us with line drawings created in these packages, again each image should ideally be saved as a separate file. If you have access to such software, line drawings should ideally be saved as greyscale EPS files.
* Please note that these packages do not always import well into typesetting software – for example, elements tend to move out of position. In addition, images created in Word can appear differently in different versions of Word, and the typesetter may be using a different version to yours. So you will need to check the artwork in your proofs carefully. In some cases we may need to redraw. Please supply a PDF of all Word figures for reference.
* It is best to supply us with the image in its original format (e.g. Excel or PowerPoint) rather than placing them in a Word document, as Word often downgrades the quality of an image.
* If you provide line art as an image file (TIFF or JPEG), it should be supplied at a resolution of at least 1200 dots per inch (dpi) or pixels per inch. (You need a higher resolution for line art than for photos to ensure that the text is crisp and does not appear fuzzy.)
* If you scan line artwork you should scan at minimum 1200dpi at the size you wish the image to appear in the book.
* Any lines/rules must be at least 0.5 points (pt) wide at the final printed size.
* For labelling use a sans serif typeface such as Helvetica that will reproduce at minimum 8pt at the final printed size.
* When preparing charts avoid using special effects such as 3D.
* If your line figures contain halftone components (e.g. a flow diagram that contains a photo), the halftones should be supplied separately as detailed below:
  + Required for: photographs, paintings, screenshots, drawings.
  + Acceptable file types: TIFF, JPEG, BMP, PNG. Please be aware the JPEG files lose quality each time they are re-saved. EPS is the preferred format for line artwork.
  + Target resolution: 300dpi minimum – *at the size the image is to appear in the book.* E.g. for the following book size, here are the ideal pixel sized for the width of the portrait image:
    - Demy (138mm x 216mm)/5.5” x 8.5”: 1200.
    - Royal (156mm x 234mm)/6” x 9”: 1500.
    - Pinched Crown (174mm x 246mm)/7” x 10”: 1800
  + (Assuming the image should stretch across the full width of the text; the height will be automatically constrained by the width.)
* To be able to supply images of acceptable quality, your digital camera must be able to take pictures at a resolution of at least 300dpi. In general, mobile phone cameras do not take pictures of acceptable quality. You must ensure you have your camera setting on the highest resolution (whatever this may be – cameras will differ in terms of quality and resolution).
* If contributors are planning to supply a large number of images, always send to Taylor & Francis, via the Editors, a few sample images to test first before proceeding with taking all your images.
* Be aware that the final quality will be determined by the quality of the files supplied. If you plan to supply a large number of images digitally, send us some sample scans in advance so we can ensure they are ok before you scan the bulk.
* In general, we would recommend not to scan images or photos, and screenshots!
* Do not use images taken from the Internet. Images on the web are low resolution at 72dpi – they will look good on your computer but will be poor quality when printed. Images from the Internet are often copyrighted – they are not necessarily free to use.
* Floating boxes have no fixed position, but rather are positioned in much the same way as a figure or table – usually as close as possible to a citation in the main text or a paragraph that pertains to it. For example, floating boxes are often used for case studies as these should be separate from the main body of the text. This type of box is usually numbered (e.g. Case study 2.1, Case study 2.2, etc. if box is in chapter 2) and is best supplied in a separate file or files with a call-out in the main manuscript (i.e. “insert box x here”). If boxes are captioned, include the caption with the box and list any source line at the end of the boxed text.

Tables should have a thick top and bottom border, a thin border under headers and generally no vertical borders. Table 1 below illustrates these points.

Table 1: Variability of Available Dies (Table 1 in Tommelein et al. 1999)   
[example of style ‘Table caption’]

|  |  |
| --- | --- |
| Type of Die | Numbers on Faces [example of style ‘Table heading] |
| A | 5, 5, 5, 5, 5, 5 [example of style ‘table-body’] |
| B | 4, 4, 4, 6, 6, 6 |
| C | 3, 3, 3, 7, 7, 7 |
| D | 2, 2, 2, 8, 8, 8 |
| E | 1, 1, 1, 9, 9, 9 |

Important characteristics of figures are their image type (type of file), quality (resolution), and final printed size.

* Acceptable image file types are: Joint Photographic Experts Group (using file extension .jpg or .jpeg), Encapsulated Postscript (.eps), Portable Document Format (.pdf), Portable Network Graphics (.png), and bitmaps (.bmp).
* Drawings constructed as lines, boxes, text, etc. within Word cannot be reproduced effectively, so **please do not make drawings using Word**.
* Printing at 300 dpi requires images of at least 1,800 pixels wide if they are full-page width or 900 pixels wide if half-page width.

It is preferred that figures are sized either to match the full-page width (e.g., Figure 1), or to match the half-page width so that they can be arranged side by side to save space if needed.

# Submission

Authors **must** submit their work in Word document format by email to the editors to [leanconstruction4.0@gmail.com](mailto:leanconstruction4.0@gmail.com). Please remember that in order to achieve the desired quality of reproduction of chapters please provide a separate file for each figure or table.

# Conclusions

The instructions presented here have been used to format this document. After you have formatted your chapter accordingly, your submission should have the same look as the document presented here.

[example of style ‘Figure’]

Figure 1: Average ± Standard Deviation of Buffer Size Relative to Number of Rolls after 1,000-Iteration Simulation where all Players have a fast Die (Figure 11 in Tommelein et al. 1999) [example of style ‘Figure caption’]

# Acknowledgments

We are glad to have completed this set of formatting instructions and hope they are clear.

# References

Alarcon, L.F. (Ed.). (1997). Lean Construction. A.A. Balkema, Rotterdam, The Netherlands.

Howell, G., Laufer, A., and Ballard, G. (1993). Interaction between Subcycles: One Key to Improved Methods. ASCE, J. Constr. Eng. Manage, 119(4), 714–728. <https://doi.org/10.1061/(ASCE)0733-9364(1993)119:4(714)>

Martinez, J.C. (1996). STROBOSCOPE State and Resource Based Simulation of Construction Processes. PhD Diss*.*, Civil & Envir. Engrg., Univ. of Michigan, Ann Arbor, MI.

Microsoft (n.d.). Office Training Center. <http://office.microsoft.com/training/ training.aspx?assetid=rc011039261033> (Feb 19, 2016).

Tommelein, I.D. (1998). Pull-driven Scheduling for Pipe-Spool Installation: Simulation of Lean Construction Technique. ASCE, J. Constr. Eng. Manage*.,* 124(4), 279–288. <https://doi.org/10.1061/(ASCE)0733-9364(1998)124:4(279)>

Tommelein, I.D., and Ballard, G. (1997). Coordinating Specialists. Technical Report, Construction Engineering and Management Program, Civil and Environmental Engineering Department, University of California, Berkeley.

Tommelein, I.D., Riley, D., and Howell, G.A. (1999). Parade Game: Impact of Work Flow Variability on Trade Performance. ASCE, J. Constr. Eng. Manage., 125(5), 304–310. <https://doi.org/10.1061/(ASCE)0733-9364(1999)125:5(304)>

# others

* The chapter must be free of libel and defamation.
* Avoid the use of Appendices in the chapter
* Guidelines to submit files associated with the chapter can be found in Appendix II.

# Appendix I: General style

**Spelling**

* US (color)

**Endings**

* ize (theorize)

**Serial commas**

* Yes (this, that, and the other)

**Quotation marks**

* single with double within (‘the “new” regime’)

**Punctuation**

* outside quotation marks (‘it is a fresh start’.)

**Acronyms**

* unpointed (USA)

**Dashes**

* spaced en dash (The essay – first published in 1960 – addresses this question.)

**Numbers**

* spelled out to ten, Arabic thereafter (one to ten, 11–)
* maximum number spans (135–136)

**Dates**

* June 7, 1918

**First letter after colons**

* capitalized

**Bulleted and numbered lists**

* Each line begins with a capital letter
* Each line ends with a full stop

**Figures and tables**

* Should there be an in-text reference for every figure and table, e.g. ‘see Figure 7.9’?

**Referencing style**

* APA (<https://www.mendeley.com/guides/apa-citation-guide>)
* In-text citation:
  + Book:
  + Chapter within a book:
  + Journal article:
  + Website:
  + Others that feature significantly (e.g. blog post, newspaper article, manuscript, dissertation):
* Book and journal titles should always be in italics, regardless of which style guide you are following.
* Author initials
  + pointed (M.F.K. Fisher)
  + unspaced (M.F.K. Fisher)
* Multiple works by same author in references list
  + listed alphabetically

# Appendix I: how to name files for submission

File names should be numbered, consistent and clear.

One example of a structure would be:

Chapter1.doc

Chapter2.doc

Chapter2\_table 2.1.doc

Chapter2\_table 2.2.doc

Chapter3.doc

Chapter3\_figure 3.1.doc