

APPENDICES - THE HANDOVER PROCESS

APPENDICES

THE HANDOVER PROCESS

APPENDICES

APPENDIX 1: TABLE OF CONTENTS FOR A QUALITY PLAN	5
APPENDIX 2: STATUS REPORT BEFORE A PRE-INSPECTION	6
APPENDIX 3: AGENDA FOR PRE-INSPECTION	7
APPENDIX 4: CHECKLIST/APPROVAL OF PRE-INSPECTION	8
APPENDIX 5: DEFECT LIST	9
APPENDIX 6: DIGITAL DEFECT RECORDING	10
APPENDIX 7: O&M DOCUMENTATION.	11
APPENDIX 8: PRE-INSPECTION – TENDER SPECIFICATION AND CONTRACT WORDING	12

APPENDICES CAN BE DOWNLOADED FROM WWW.VAERDIBYG.DK

APPENDIX 1

EXAMPLE TABLE OF CONTENTS FOR A QUALITY PLAN

QUALITY PLAN

1. PROJECT IDENTIFICATION	2
1.1 <i>Building project</i>	2
1.2 <i>Building project organisation</i>	2
2. ORGANISATION	4
2.1 <i>Project organisation</i>	4
2.2 <i>Contract organisation</i>	4
2.3 <i>Sub-contractors</i>	5
3. QUALITY ASSURANCE, GENERAL	6
3.1 <i>Purpose</i>	6
3.2 <i>Structure of quality assurance</i>	6
4. CONTRACT AGREEMENT	7
4.1 <i>Document overview</i>	7
4.2 <i>Inspection and documentation</i>	7
5. PREPARATION FOR PRODUCTION	8
5.1 <i>Process review</i>	8
5.2 <i>Inspection plan</i>	8
5.3 <i>Audit of sub-contractors' quality and control plans</i>	8
6. QUALITY ASSURANCE ON THE PROJECT	9
6.1 <i>Management of documents</i>	9
6.2 <i>Information to staff</i>	9
6.3 <i>Incoming goods control</i>	9
6.4 <i>Process control</i>	10
6.5 <i>Contract changes</i>	10
6.6 <i>Audit of sub-contractors' quality assurance</i>	10
7. COMPLETION OF PRODUCTION	11
7.1 <i>Final control</i>	11
7.2 <i>Rectification of defects</i>	11
7.3 <i>Documentation</i>	11
8. THE CONTROL PLAN	12

APPENDIX 2

EXAMPLE STATUS REPORT BEFORE A PRE-INSPECTION

STATUS REPORT FOR PRE-INSPECTION

Date:

Client		
Project		
Contract		
Contractor		
Agreed postponed works: (List tasks, with reference to written agreement)		
REMAINING WORKS (EXAMPLE)		
(2. Primary building elements ...		
(3. Additional building elements		
<ul style="list-style-type: none"> • (31) 4 External walls – jointing around windows • (32) 4 Internal walls – skirting boards • ... • (37) 6 Roofs – fascia boards • (38) 1 Other – name plates 		
(4.) Surfaces		
<ul style="list-style-type: none"> • (41) 4 External wall surfaces – supplementary parts • (42) ... • (43) 2 Internal floors – beading 		
(X.) Technical systems/commissioning		
<ul style="list-style-type: none"> • Training and instruction of operations staff • Manuals produced for the project • etc. ... 		
Overall estimate of remaining work for the present contract:	Approx. %	
Other matters.		
Detailed plan for completion available:		
Plan for handover of operations data available:		
Can handover be effected on the agreed date:	Yes	No.
Has an optional extension of the deadline been considered?	Yes	No.
Comments:		
Signature _____ Date: _____		

APPENDIX 3

EXAMPLE AGENDA FOR A PRE-INSPECTION

PRE-INSPECTION

Pre-inspection scheduled for (date)

Participants: Client, client adviser, construction manager, professional supervisors, contractor and any sub-contractors.

AGENDA

- Inspection of the building
- Discussion of works and completion up to handover.
- Review and approval of checklist (Appendix 4)

CONTRACTOR (TURNKEY/MAIN/TRADE CONTRACT):

Ahead of the meeting date, the status report(s), completion plan and plan for handing over operations data and instruction operations personnel should be produced and circulated.

- The material submitted is presented.
- User and operations guides are presented.

CONSULTANT

Ahead of the meeting date, the building is inspected on the basis of the material provided. The basic project materials (intentions) are compared with what has been executed.

- Determine the total % of remaining work.
- Approve any postponed works (nature and extent).
- Approve completion plan and plan for handing over operations data and instruction of operations personnel.
- Assess the other material provided.

All participants approve the checklist (pre-inspection completed).

APPENDIX 4

EXAMPLE CHECKLIST/ APPROVAL OF PRE-INSPECTION

CONSTRUCTION PROJECT:

CLIENT:

Basis Status report dated _____ Plan for completion dated _____ Plan for handing over operations data dated _____		
	READY/APPROVED	COMMENTS
CONTRACTOR		
Status report/statement (all contracts)		(total % of remaining work)
Postponed works as agreed		
Plan for completion		
Plan for handover of operations data		
Material for user guide		
Material for operations guide		
CONSULTANTS		
INSPECTION of the building		
- Recorded errors and defects		
CHECK against project intentions		
- Risk statement		(re-assess in case of significant deviations)
- Environmental level		
- Follow up of ATs in building permit		
- Financial position		(status assessment)
APPROVED PRE-INSPECTION Date: _____ Client _____ Consultant _____ Contractor _____		

APPENDIX 5

EXAMPLE DEFECT LIST

DEFECT LIST

Project: Magleparken, Havlunde
 File: f:\Magleparken\Dokumenter\Mangellister\141128 Mangelliste.xls
 Created by: SBR

No.	Location (building, floor, room-no etc.)	Description	Created	Contractor	Deadline	Rectified	OK Contractor	OK Const. manager	OK Client	Comments/ Document
1.10	101A, Kitchen	Cupboard doors need adjusting	13/11/14	Kitchen	01/12/14	14/11/14	OK	OK		
1.11	101A, Kitchen	Closing valve in cooker hood	13/11/14	Kitchen	01/12/14	18/11/14	OK			
1.13	101A, Bathroom	Joints around tiles to be fixed	14/11/14	Painter	01/12/14					
2.03	102A, Living room	Joints around window frames	17/11/14	Painter	04/12/14					
3.13	105 B, Corridor	Cable for entry phone not fitted	17/11/14	ELECTRICITY	01/12/14	28/11/14	OK	OK	OK	
0.12	All kitchens	Cutlery tray missing	17/11/14	HE	01/12/14					To be supplied by Svane

Download the form as an Excel file from www.vaerdibyg.dk

APPENDIX 6

EXAMPLES OF DIGITAL DEFECT RECORDING

15.33 54 %

365veidekke.sharepoint.com

Hoffmann Intranet

Nyhedsstrøm OneDrive Websteder

Mangelregistrering - Alle elementer

Office 365

GENNEMSE ELEMENTER LISTE

Byggesag PFM - UE

Øvre niveau REDIGER LINKS

Mangelregistrering

+ nyt element eller rediger denne liste

Alle elementer Find et element

	Mangel nr.	Opgang	Løjl. nr	Udbedres af	Mangel	GodkendtUE	Oprettet	Oprettet af	Redige
Dokumenter	1	...	1	Maler	Pletter på væggen	Nej	13. august 2013	<input type="checkbox"/> Jannik Egeskov	
Notesbog	2	...	1	Tømrer	Der mangler mangler afslutning	Ja	13. august 2013	<input type="checkbox"/> Jannik Egeskov	
Mangelregistrering	3	...	2	Murer	Fliser revner	Nej	13. august 2013	<input type="checkbox"/> Jannik Egeskov	
Mønstret hændelse	4	...	4	Tømrer	Bla bla	Nej	14. august 2013	<input type="checkbox"/> Jannik Egeskov	

Søg i dette websted

APPENDIX 6

EXAMPLES OF DIGITAL DEFECT RECORDING

Sanderumvej 168
5250 Odense SV
+45 7020 0409
mail@statussystem.dk

Administration **Velkommen** [rem@statussystem.dk](#)

STATUSSYSTEM

Opstart Projektmappe 2 Rediger Projektmappe 1 Slet Projektmappe 1 Flarkiv

Projekt EtageBO 41G Opgang 01

262 Alle 5 Afsluttet 20 Ikke godk. 125 Afsluttet

54 Oprettet 58 Færdig

21 22 2 B 48

Registrerings tegninger **Hent**

Østre Stationsvej 41G 2.th	11
Østre Stationsvej 41G 2.th	11
Østre Stationsvej 41G 2.tv	6
Østre Stationsvej 41G 3.th	5

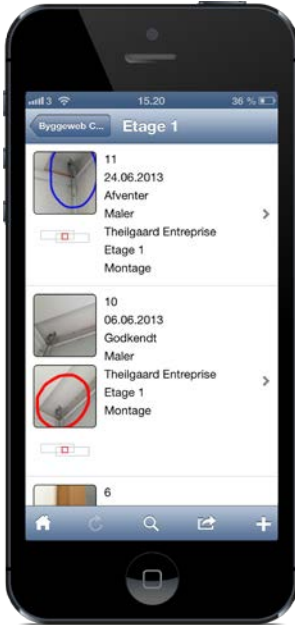
Mangel **Byd filter** **Hent**

Opstart reg. **Opret reg.** **Emne** **Kategori/Liste** **Tidsfrist** **Tegning/GPS**

#	Tegning/GPS	Tidsfrist	Kategori/Liste	Emne	Ansvarlig
422	Østre Stationsvej 41G S.tv (1)	20-11-2012	MALER	Sag på Emne	Vælg firma Oprettet: 20-11-2012 09:13 Byggefirmaet Remcon as Rene Consort Afsluttet Ikke godk.
423	Østre Stationsvej 41G S.tv (1)	20-11-2012	MALER	slav væg	Oprettet: 20-11-2012 09:15 Byggefirmaet Remcon as Rene Consort Afsluttet Ikke godk.

APPENDIX 6

EXAMPLES OF DIGITAL DEFECT RECORDING



APPENDIX 7

EXAMPLE O&M DOCUMENTATION



**Enemærke &
Petersen a/s**

Dato: 01.12.2013
Rev.:

KVALITETSPLAN

Sagsnr.: 10470

DRIFT OG VEDLIGEHOLDELSE:

(23) Aluminiums tag og inddækninger - Falzonal

Fabrikat/leverandør:	Falzonal Muncholm A/S Tolsagervej 4 8370 Hadsten Tlf.: 86 21 50 55 sk@muncholm.dk www.Muncholm.dk
Entreprenør:	Enemærke & Petersen a/s Klostergården Ole Hansens Vej 1 4100 Ringsted Tlf.: 57 61 72 72 Fax: 57 67 04 72 www.eogp.dk
Materiale/type:	Tagbeklædning – Falzonal . 0.7 mm farvet Aluminium Matgrauhell – 17H7 - 10

Vedligeholdelse

Emne	Behandling	Interval, år
Vedligeholdelse:	En Falzonal tagbeklædning behøver normal vedligeholdelse for at bevare sin styrke, egenskaber og funktion. Påvirkninger fra omgivelserne, f.eks. fra plantevækst, træer, buske m.v. kan have indflydelse på tagets udseende og funktion. Derfor er et årligt eftersyn af tagets omgivelser, ventilationsåbninger, samlinger en god ide. Eftersyn og udbedring af eventuelle skader sikrer lang levetid for Falzonal tagbeklædningen.	Årligt.
Rengøring:	Som i andre sammenhænge er det bedre at forebygge end at behandle. Som regel er det tilstrækkeligt at børste af med en blød børste Rengøring af Falzonal tagbeklædningen foretages med rent vand, eventuelt tilsat et svagt rengøringsmiddel. Begynd altid afvaskning fra neden og i et naturligt afgrænsede områder. Skyl efter med rent vand for at sikre, at overfladen er helt ren.	Efter behov ved årlig besigtigelse
Lakskader	Ved eventuelle lak- eller korrosionsskader kontaktes leverandør omgående for udbedringsanvisning	
Hvad bygningsdelen ikke kan tåle:	Slibemidler, opløsningsmidler, hård børstning, højstrykspuling og lign.	

Henvisninger

Vedligeholdelses vejledning af .Falzonal tagbeklædning fra Muncholm

APPENDIX 8

PRE-INSPECTION TENDER AND CONTRACT WORDING

In order to complete the handover process and pre-inspection in accordance with the contract, it is a good idea to supplement the wording in the tender specifications and/or contract documents (in relation to advice to the client, general consultancy and contracts), in order to clarify what is expected with regard to the handover process and the pre-inspection.

Some of the services can be provided by consultants and by contractors, and it should be made clear who is responsible for each, so they can be priced in the tender.

There follows a list of keywords covering clauses that could be included in tender specifications or contracts.

KEYWORDS FOR ADDITIONAL PROVISIONS IN CONTRACTS

- 1 A pre-inspection shall be carried out in accordance with Værdibyg's guide to 'The handover process', which can be downloaded from www.vaerdibyg.dk.
- 2 The pre-inspection will normally be convened by the client/client adviser, but can also be convened by the consultant or the contractor – provided that this was agreed in the beginning.
"The **client/consultant** must convene a pre-inspection no later than **x** weeks prior to the agreed handover date, to be held no later than **y** weeks prior to that date. **The contractor/construction manager/professional supervisors** must produce the following materials for use in the pre-inspection:
 - Status report showing the degree of completion, and details of critical elements in the remainder of the work period
 - Completion plan broken down into activities and staffing
 - Plan for adjustments and tests
 - Plan for handing over operations data, instruction of operations personnel.
 - This material must be provided to the client no later than 1 week prior to the pre-inspection.
- 3 **No later than 1 week prior to the pre-inspection, the contractor and/or the consultant** must draw up/assist in the production of a status report, completion plan and plan for handover of operations data etc.
- 4 **The consultant/client adviser** shall conduct a review of the building prior to the pre-inspection, based on the material produced.
- 5 Consultants and the contractor should participate in the pre-inspection.
- 6 The consultant shall produce minutes of the pre-inspection and determine together with the client whether the pre-inspection has been completed or not (i.e. whether the agreed documents have been submitted and the pre-inspection has been carried out). If not, a fresh pre-inspection shall be convened."
- 7 **Enter any incentives for a good handover process.**

The process during and after handover – i.e. the handover meeting, rectification of defects and defect inspection – does not require a specific passage in the tender specifications, as it follows the usual practice as described in AB92.

THE VALUE CREATING BUILDING PROCESS (VÆRDI-BYG) IS A PARTNERSHIP BETWEEN SEVEN OF THE MOST INFLUENTIAL ORGANISATIONS IN THE BUILDING INDUSTRY. VÆRDIBYG IS DEVELOPING A NEW STANDARD PRACTICE FOR THE CONSTRUCTION PROCESS COVERING THE DIFFERENT ACTORS IN THE INDUSTRY.

THIS DISCUSSION BOOKLET TAPS INTO THE DEBATE ON PHASE TRANSITIONS, WHICH THE PARTIES TO THE CONSTRUCTION PROCESS IDENTIFY AS THEIR ACHILLES' HEEL. THE BOOKLET PRESENTS FIVE PERSPECTIVES ON HOW PHASE TRANSITIONS CAN BE HANDLED. SOME OFFER ORDER AND LOGIC, BUT DO NOT ADDRESS THE ONE-OFF PRODUCTION THAT TYPIFIES THE BUILDING INDUSTRY. OTHERS PROVIDE FOR DIALOGUE AND OPEN THE WAY FOR NEW IDEAS, BUT POSSIBLY AT THE EXPENSE OF SCHEDULES AND BUDGETARY CONTROL.