

Appendix P-7: Operations Commissioning Matrix
B3 Minnesota Sustainable Building Guidelines—VERSION 2.0

ACTIVITIES	PROJECT PHASE									TEAM MEMBERS RESPONSIBILITIES		
	Agency Planning	Pre-Design - Programming	Pre-Design - Site Selectin	Schematic Design	Design Development	Construction Documents	Construction	Correction Period	On-Going Operations	Guideline Leader	Facilities Operations Manager (FOM)	
1. GENERAL												
1.01 Evaluate existing facility operations	x										R	
1.02 Participate on Design & Construction Commissioning Team	x	x			x	x	x	x			R	
1.03 Engage Operations Commissioning Team					x					x	R	
1.04 Operations Commissioning Plan					x	x		x		x	R	
1.05 Annual Operations Commissioning Review & Plan Update									x	x	R	
1.06 Annual Operations Commissioning Report									x	x	R	
1.07 New employee training program									x		R	
1.08 Submit Outcome Documentation	x	x			x	x	x	x	x	R		
1.09 Next Use									x		R	
2. SYSTEM TURNOVER PROCESS FROM CONSTRUCTION TO OPERATIONS												
2.01 Define turnover prerequisites						x					R	
2.02 Define authority for official acceptance & turnover						x					R	
2.03 Operations team familiarization with project documentation and systems							x				R	
2.04 Complete systems transfer from contractors to operators								x			R	
3. PROBLEM RESPONSE PLAN												
3.01 Problem documentation process							x				R	
3.02 Problem response process							x				R	
3.03 Problem resolution documentation process							x				R	
3.04 Implementation								x	x		R	
3.05 Annual evaluation and reporting								x	x	R		

OPERATIONS COMMISSIONING MATRIX
ACTIVITIES & RESPONSIBILITIES

ACTIVITIES	PROJECT PHASE										TEAM MEMBERS RESPONSIBILITIES			
	Agency Planning	Pre-Design - Programming	Pre-Design - Site Selectin	Schematic Design	Design Development	Construction Documents	Construction	Correction Period	On-Going Operations	Guideline Leader	Facilities Operations Manager (FOM)			
4. MAINTENANCE PLAN														
4.01	Cleaning products and practices						x					R		
4.02	Cleaning products documentation						x					R		
4.03	Moisture prevention practices						x					R		
4.04	Moisture response practices						x					R		
4.05	Moisture control documentation						x					R		
4.06	Preventive maintenance activities						x					R		
4.07	Preventive maintenance documentation						x					R		
4.08	Implementation							x	x			R		
4.09	Annual building IAQ performance evaluation								x			R		
4.10	Occupant comfort and satisfaction surveys								x			R		
4.11	Annual evaluation and reporting							x	x		R			
5. MEASUREMENT & VERIFICATION PLAN - APPLY TO EACH SYSTEM														
5.01	Determine which option and methods from IPMVP will be used					x						R		
5.02	Create an accurate baseline				x							R		
5.03	Define key assumptions about significant variables or unknowns					x						R		
5.04	Define level of accuracy to be achieved for all key components					x						R		
5.05	Assign roles & responsibilities					x						R		
5.06	Define criteria for equipment metering, calibration, and measurement period.					x						R		
5.07	Procedures to compare weather-normalized expectations, track trends, and identify aberrations					x						R		
5.08	Method to quantify savings					x						R		
5.09	Problem reporting process						x					R		
5.10	M&V process quality assurance measures					x						R		
5.11	M&V documentation processes					x						R		
5.12	Incorporate M&V elements into the construction documents					x						R		
5.13	Implementation							x	x			R		
5.14	Annual evaluation and reporting							x	x		R			

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6. SYSTEMS RECOMMISSIONING MANUAL													
6.01 System descriptions						x					R		
6.02 As built control drawings and sequences of operation								x			R		
6.03 Time of day schedules and plan for assessing their relevance							x				R		
6.04 Seasonal considerations						x					R		
6.05 Recalibration schedule							x				R		
6.06 Adjustable setpoints and plan for assessing their relevance							x				R		
6.07 Diagnostic tools							x				R		
6.08 Recommissioning tests							x				R		
6.09 Implementation								x	x		R		
6.10 Annual evaluation and reporting								x	x	R			