

# ISO/ASTM 52939:2023-12 (E)

## Additive manufacturing for construction - Qualification principles - Structural and infrastructure elements

---

<b>Contents</b>		<b>Page</b>
Foreword .....		iv
Introduction .....		v
1	Scope .....	1
2	Normative references .....	1
3	Terms and definitions .....	1
4	Constructability, assessment and review .....	3
4.1	General .....	3
4.2	AC feasibility assessment .....	4
4.3	Validation plan .....	5
5	Infrastructure of the AC cell .....	5
6	Qualification of the additive construction process .....	8
6.1	Quality-relevant process steps within the additive construction process .....	8
6.2	Data preparation .....	9
6.3	Requirements for the material management .....	10
6.4	System related pre-processing .....	11
6.5	Built process guidance .....	12
6.6	System (default) post-processing .....	13
6.7	Process qualification .....	14
7	Quality assurance .....	15
7.1	General .....	15
7.2	Personnel requirements .....	15
7.3	Documentation and tracing of the process steps .....	16
7.4	Quality controls .....	17
7.5	Delivery and logistics .....	18
Annex A (informative)	Supplementary information .....	19
Annex B (informative)	Examples for AC quality assurance .....	28
Annex C (informative)	Examples for quality assurance steps in built process guidance .....	34
Annex D (informative)	Examples for specific processes .....	36
Bibliography .....		38