

PROTECTIVE COATING SYSTEM COMPARISON

NZS 3404.3:2026 / AS/NZS 2312.1:2014 | DFT, COAT COUNT, DURABILITY & APPLICATION EFFICIENCY



CONSOLIDATED PROTECTIVE COATING SYSTEM COMPARISON

System	Generic system	Surface prep	Coat build µm DFT	Total DFT	Coats	C2	C3	C4	C5
MCU4	Moisture cured urethane	Sa 2½	150 + 75	225 µm	2	50 yrs	40 yrs	25 yrs	15 yrs
MCU3*	Moisture cured urethane	St 3	150 + 75	225 µm	2	50 yrs	40 yrs*	25 yrs	15 yrs
MCU5	Moisture cured urethane	Sa 2½	150 + 150 + 100	400 µm	3	—	50 yrs	40 yrs	25 yrs
PUR5	Zinc rich + HB epoxy + polyurethane	Sa 2½	75 + 200 + 50	325 µm	3	40 yrs	25 yrs	25 yrs	15 yrs
PSL2	Zinc rich + HB epoxy + polysiloxane	Sa 2½	75 + 175 + 75	325 µm	3	40 yrs	25 yrs	25 yrs	15 yrs
EHB6	Zinc rich + epoxy MIO + epoxy MIO	Sa 2½	75 + 125 + 125	325 µm	3	—	—	—	15 yrs
MCU2 (2014)	Zinc rich MCU + MCU MIO + MCU finish	Sa 2½	75 + 75 + 75	225 µm	3	25 yrs	15 yrs	—	—

MCU4 current configuration: 150 µm MCU-Miozinc® HS + 75 µm MCU-Miotopcoat® or MCU-Topcoat® where required to suit service, colour and gloss requirements.

* **MCU3: St 3 surface preparation.** NZS 3404.3:2026 lists MCU3 at both 15 and 40 years in C3; the St 3 entry is also identified for maintenance use.

DIRECT COMPARISON: MCU4 AGAINST PUR5, PSL2 AND EHB6

Parameter	MCU4	PUR5	PSL2	EHB6
Total nominal DFT	225 µm	325 µm	325 µm	325 µm
Number of coats	2	3	3	3
DFT difference vs MCU4	—	100 µm more	100 µm more	100 µm more
C2 major maintenance	50 yrs	40 yrs	40 yrs	—
C3 major maintenance	40 yrs	25 yrs	25 yrs	—
C4 major maintenance	25 yrs	25 yrs	25 yrs	—
C5 major maintenance	15 yrs	15 yrs	15 yrs	15 yrs
Standard surface preparation	Sa 2½	Sa 2½	Sa 2½	Sa 2½

MCU4 — AT A GLANCE

2 COATS vs 3 coats	225 µm vs 325 µm	30% LESS DFT + 1 fewer coat	≈10 MIN fastest tack free	≈45 MIN recoat with MCU-Quickcure®	EQUAL / GREATER C2–C5 durability*
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MCU-Coatings®: PRACTICAL APPLICATION ADVANTAGES

• Two coat efficiency: MCU4 provides 225 µm total DFT in two coats, compared with three coats and 325 µm for PUR5, PSL2 and EHB6. • Rapid dust free / tack free: At 25°C / 60% RH and 75 µm DFT, MCU-Miozinc® HS and MCU-Topcoat® are tack free in approximately 10 minutes; MCU-Miotopcoat® is approximately 30 minutes. The short exposure period materially reduces the opportunity for airborne dust and contamination to mark fresh coating. • MCU-Quickcure®: Can be added where accelerated recoat and cure development are required. At 25°C / 60% RH, MCU-Miozinc® HS reduces from 4 hours to about 45 minutes recoat, while MCU-Miotopcoat® and MCU-Topcoat® reduce from about 5 hours to about 1 hour. This brings near full functional cure development much earlier in the coating cycle; published full cure remains product, temperature and DFT dependent.	• Dew point advantage: MCU-Miozinc® HS can be applied from 6% to 99% RH. Conventional dew point restrictions do not apply, provided the substrate is visibly dry, clean and suitable for coating. • Maximum recoat flexibility: MCU-Miozinc® HS has an indefinite maximum recoat interval, reducing the risk of additional surface preparation following programme delays. • Single component and programme benefit: No two pack mixing ratio and no pot life limitation. Fewer full coats, rapid recoating and wider application windows can reduce labour, access occupation, inspection stages and overall project duration.
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NB Drying, dust free / tack free, recoat and cure times vary with temperature, RH and DFT. Higher film builds require additional time. Current product TDS and project specification remain controlling documents.

Sources: NZS 3404.3:2026 Tables 5 to 8 and Appendix A; AS/NZS 2312.1:2014 Table 6.3; current MCU-Miozinc® HS, MCU-Miotopcoat®, and MCU-Topcoat® TDS.