

DRAFT FOR REVIEW — Not Doctor-approved for training. VERIFY items must be cleared before competency use.



IN-HOUSE LABORATORY

Cypress & Katy, TX

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Version 0.1 DRAFT | Target effective 09/10/2026

Indirect Bonding Trays

SprintRay IDB 2 / IDB 3 — Lab Manufacturing Procedure

Smile Avenue Family Dentistry — In-House Laboratory

SprintRay IDB 2 / IDB 3 — Lab Manufacturing Procedure

Document ID	SOP-LAB-130
Version	0.1 DRAFT
Effective (target)	09/10/2026
Owner	Lab Technician (process owner)
Status	DRAFT FOR REVIEW

Start: Case received in Medit Lab with scan QC

End: IDB tray bagged and logged in SEAZONA for outbound delivery

1. Purpose

This procedure standardizes in-house manufacturing of SprintRay indirect bonding trays (IDB 2 and/or IDB 3) for orthodontic bracket transfer, when the practice elects to produce them in-lab.

2. Scope

In scope: Medit Lab intake → scan QC → design (VERIFY) → RayWare / Pro 2 → ProWash S → cure → finish clean → bag & SEAZONA.

Out of scope: Bracket bonding appointment; clinical adhesive protocols; Motto trays; non-SprintRay printers.

Ortho volume — VERIFY

Smile Avenue ortho caseload / whether IDB is produced in-house at meaningful volume is **VERIFY** before training rollout. If volume is low, keep this SOP as contingency reference only.

3. Roles

Role	Responsibility
Clinical Assistant / Office	Sends case; receives bagged tray
Lab Technician	Scan QC; design approve; manufacture; bag; SEAZONA
Trainer / Lead Lab Technician	Competency sign-off
Doctor	Ortho Rx / bracket plan; remake authorization

4. Practice Configuration

#	Item	Smile Avenue setting
1	Printer	Pro 2 only for this path
2	Preferred resin on NanoCure stack	IDB 3 (IFU validates NanoCure for Pro 2 / Pro S)
3	IDB 2 note	IFU-007 lists ProCure 2 / ProCure only — not NanoCure. VERIFY before using IDB 2 on Smile Avenue NanoCure-only path; prefer IDB 3 unless practice adds validated ProCure 2.
4	Cure unit	NanoCure — IDB 3 profile when using IDB 3. For IDB 2: VERIFY cure device (not NanoCure per IFU-007).
5	Case intake	Medit Lab
6	Design	VERIFY — outside CAD / ortho design software or SprintRay Cloud Design
7	Wash	ProWash S — IPA ≥ 91%. IDB 3: preprogrammed SprintRay IDB 3 cycle (or custom 3/5/3 on Pro Wash/Dry). IDB 2: standard preprogrammed cycle.
8	Layer thickness	IDB 3: 100 µm
9	Design approval before print	Lab Technician
10	Case log	SEAZONA
11	Ortho volume	VERIFY

5. Safety

- Treat uncured IDB resins as sensitizers/hazardous. PPE + ventilation.
- Do not bag under-cured trays. Do not use expired resin.
- Do not claim NanoCure validation for IDB 2 without IFU update / practice VERIFY.

6. Materials & Equipment

Resin	Cure (IFU)	Notes
IDB 3 (clear)	NanoCure or ProCure 2	Preferred on Smile Avenue Pro 2 + NanoCure stack
IDB 2	ProCure 2 or ProCure	VERIFY — not listed for NanoCure in IFU-007_7

Stack: Medit Lab → design (**VERIFY**) → RayWare / Dashboard Print Setup → Pro 2 → ProWash S → NanoCure (IDB 3) → SEAZONA.

7. Process Controls

Gate	Do not proceed if	Proceed when
Ortho volume / indication unclear	No Doctor Rx for IDB	Rx clear (VERIFY volume policy)
IDB 2 + NanoCure only	No validated cure path	Switch to IDB 3 or VERIFY ProCure 2
Design	Not approved	QC-A pass
Pre-cure	Wet	Fully dry
Cure	Wrong profile / invented times	Exact validated profile complete
Outbound	Failed QC-E	Bagged + SEAZONA

8. Procedure

A. Intake & scan QC

- Medit Lab: verify ID, arch, bracket system/plan reference, IDB 2 vs 3, due date.
- QC-SCAN.**

B. Design (**VERIFY**)

- Design/receive IDB tray STL from ortho CAD / design service.
- Lab Technician **approves**. **QC-A:** Bracket wells match plan; STL labeled; resin family correct.

C. Nest

- IDB appliance type; IDB 3 (preferred) or IDB 2; auto-orient preferred; 100 µm for IDB 3; Pro 2.

D. Print

- Shake **1 minute**; pour; assign; print; log lot. **QC-B.**

E. Wash & dry

- IDB 3:** ProWash S preprogrammed **SprintRay IDB 3** (or documented equivalent). **IDB 2:** standard cycle. Dry fully. **QC-C.**

F. Post-cure

8. **IDB 3:** NanoCure **IDB 3** profile. **IDB 2:** only on IFU-validated cure unit (**VERIFY** — not NanoCure per current IFU).
9. Remove supports; Scotch-Brite/Fuzzies for nubs (IDB 3). **QC-D**.

G. Finish, clean, bag

- .0. Soap + brush (+ steamer); dry; bag; SEAZONA. **QC-E**.

End of SOP-LAB-130. Bonding appointment is clinical.

9. Case Log (SEAZONA)

Field	Entry
Date / case ID / arch	
Resin	☐ IDB 3 ☐ IDB 2 (VERIFY cure)
Ortho plan reference	
Design approved by (Lab Technician)	
Wash cycle	☐ IDB 3 preset ☐ Standard ☐ Other
Cure	☐ NanoCure IDB 3 ☐ ProCure 2 (VERIFY) ☐ Other
Bagged outbound	☐ Yes — time __

10. Quality Checkpoints

ID	When	Pass	Fail action
QC-SCAN	Intake	Usable	Return
QC-A	Pre-print	Plan match + approved	Redesign
QC-B	Post-print	Complete wells	Remake
QC-C	Post-wash	Clean + dry	Re-wash/dry
QC-D	Post-cure	Cured on validated unit	Remake
QC-E	Outbound	Finish + bag + SEAZONA	Hold

11. Remake Criteria

Incomplete wells; under-cured; IDB 2 cured on non-IFU device without **VERIFY**; torn tray → remake. Unsure → escalate. Ortho volume policy unclear → hold production pending Doctor/lab lead.

12. Competency

Requirement	Sign-off
Read SOP-LAB-130; understand IDB 3 vs IDB 2 cure gate	Tech _ Date ____
Demonstrates IDB 3 Pro 2 + NanoCure path	Trainer _ Date ____
Observed cases (VERIFY count if low volume)	1. ____ 2. ____ 3. ____
Unsupervised authorization	_ Date ____

13. Troubleshooting & Escalation

Problem	Action
Soft tray	Confirm dry + correct IDB 3 NanoCure profile
IDB 2 requested	Prefer IDB 3 on NanoCure stack; else VERIFY ProCure 2
Low ortho volume	Do not train broadly until VERIFY

SprintRay Support: 1-800-914-8004.

14. References

- SprintRay IDB 2 IFU-007_7 (effective 06/25/2024) — cure: ProCure 2 / ProCure
- SprintRay IDB 3 IFU-033 Revision 2 (effective 06/11/2026) — NanoCure / ProCure 2; ProWash S “SprintRay IDB 3”
- Local IFU archive: IDB2.txt , IDB3.txt

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Review annually or when SprintRay IFU / equipment changes. Confirm all VERIFY items before training use.

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