

3M ESPE Dental

The simplicity of one-step placement with the confidence of a deep cure.



If you like the idea of a time-saving, 5 mm bulk placement but are concerned whether it will cure sufficiently, then learn how Filtek™ Bulk Fill Posterior Restorative and Elipar™ DeepCure LED Curing Lights can help.

Most incrementally placed composites have a level of “cloudiness” prior to light curing that affects depth of cure. To overcome the cloudiness—the refractive indices of the resin and filler components need to match.

Typically the resin has a refractive index that’s significantly lower than that of the filler. But Filtek Bulk Fill Posterior Restorative is formulated with aromatic resins which allows the refractive index to more closely match the filler.

The result is an increased depth of cure.

The action that forces the pencil to bend (diagram in right column), is the same action that forces the light to bend in a composite when the refractive indices of the filler and resin do NOT match.

If the light traveling through a material is bent to a large enough degree, then the light will not be transmitted through the material (left diagram below), thus resulting in composite with a lower depth of cure.

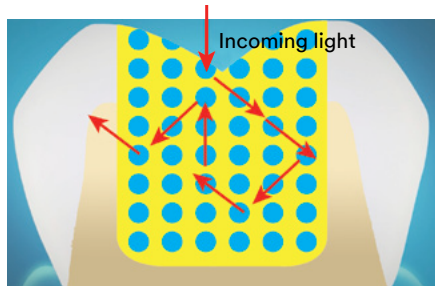
What’s a refractive index?



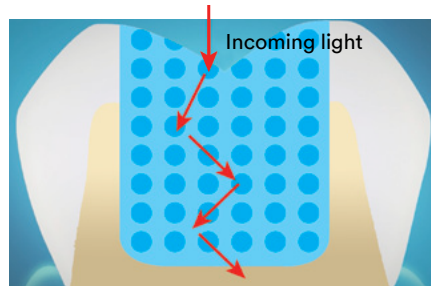
A material’s refractive index determines how light passes through it.

Ever notice how a pencil appears to be bent when it’s placed in a glass of water? That’s because it’s placed in two materials with unmatched refractive indices. When light passes from air (refractive index of 1) into water (refractive index of 1.33), the light is bent—and so the pencil appears to bend.

Refractive index does not match



Refractive index does match



- = Resin matrix does not match filler
- = Resin matrix does match filler
- = Filler particle
- = Light ray

If the filler and the resin DO have matching optical properties (right diagram), such as is the case with Filtek™ Bulk Fill Posterior Restorative, then the light will not be significantly bent, and the light will be successfully transmitted through the material, which increases the material’s depth of cure.

Designed to work together.



Imagine how fast and easy posterior restorations could be with a simple, one-step placement AND the confidence of a deep cure! That's precisely what you get when you use Filtek™ Bulk Fill Posterior Restorative and an Elipar™ DeepCure LED Curing Light together ... a fast posterior restoration and a predictable, reliable cure.

Curing Protocol

Caries Classification	Increment Depth	All Halogen Lights (with output of 550-1000 mW/cm ²)	Elipar™ DeepCure-S LED Curing Light
Classes I, III, IV and V	4mm	40 sec	20 sec
Class II	5mm	20 sec occlusal 20 sec buccal 20 sec lingual	10 sec occlusal 10 sec buccal 10 sec lingual

Note: For Class II restorations, remove the matrix band prior to the buccal and lingual curing steps.

Ordering Information

Filtek™ Bulk Fill Posterior Restorative

Item #	Product Description
4864TK	Filtek™ Bulk Fill Posterior Restorative Capsule Procedure Kit Kit includes: 40 – 0.2g capsules: 20 each of A2 and A3; 5.0ml vial Scotchbond™ Universal Adhesive; Instructions for Use; 10 – Sof-Lex™ Spiral Finishing Wheels; 10 – Sof-Lex™ Spiral Polishing Wheels; 1 – RA Mandrel; Technique Guide; Instructions for Use
4863TK	Filtek™ Bulk Fill Posterior Restorative Syringe Procedure Kit Kit includes: 2 – 4g syringes: 1 each of A2 and A3; 5.0ml vial Scotchbond™ Universal Adhesive; Instructions for Use; 10 – Sof-Lex™ Spiral Finishing Wheels; 10 – Sof-Lex™ Spiral Polishing Wheels; 1 – RA Mandrel; Technique Guide; Instructions for Use

Refill SHADE	Item # SYRINGE	Item # CAPSULE
A1	4863A1	4864A1
A2	4863A2	4864A2
A3	4863A3	4864A3
B1	4863B1	4864B1
C2	4863C2	4864C2

SYRINGE SHADE REFILLS include 1 – 4g syringe; Technique Guide; Instructions for Use. CAPSULE SHADE REFILLS include 20 – 0.2g capsules; Technique Guide; Instructions for Use.

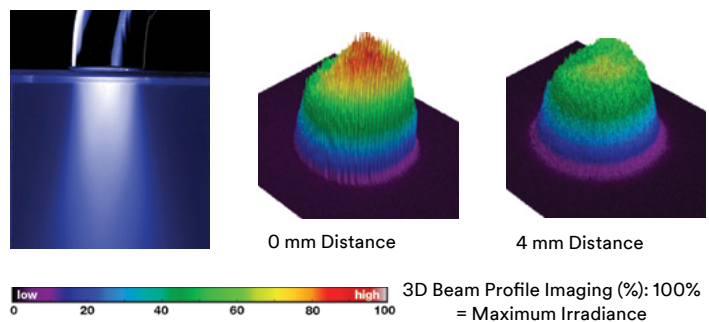


3M ESPE Dental
2510 Conway Avenue
St. Paul, MN 55144-1000 USA
Phone 1-800-634-2249
Web 3M.com/dental

3M Canada
Post Office Box 5757
London, Ontario N6A 4T1
Canada
Phone 1-888-363-3685

A deep, uniform cure, even at the bottom of the cavity. Another reason light may not make it through the composite may be the curing light. That's why we make the Elipar DeepCure LED Curing Lights! They produce a more collimated beam profile for better light uniformity and intensity distribution at clinically relevant distances—even in deeper areas.

Uniform Beam Profile



Source: 3M ESPE Dental internal data

Elipar™ DeepCure LED Curing Lights

Item #	Product Description
76975	Elipar™ DeepCure-S LED Curing Light—Stainless Steel Contains: Handpiece (Cordless), Charging Base (230V); Li-ion Battery; 10mm Light Guide; Eye Shield
76973	Elipar™ DeepCure-L LED Curing Light—Lightweight Contains: Handpiece (built-in Li-ion battery); Universal Power Supply with 5 adaptors; 10mm Light Guide; Eye Shield; 3 Curing Discs
76981	Elipar™ DeepCure-S Light Guide, 10mm
76983	Elipar™ DeepCure-L Light Guide, 10mm
76984	Elipar™ DeepCure Eye Shield
76985	Elipar™ DeepCure-S Rechargeable Li-ion Battery
76965	Elipar™ DeepCure-L Curing Discs (5pcs.)

3M, ESPE, Elipar, Filtek, Scotchbond and Sof-Lex are trademarks of 3M or 3M Deutschland GmbH. Used under license in Canada. Printed in USA. © 3M 2015. All rights reserved. 70-2013-0713-2