

# Reliance DURAFlex

## Instruction Guide

DURAFlex™ is a partial denture material with flex. A modified composite resin that can easily be repaired or relined unlike conventional nylon materials.

Since there is NO MMA (methyl methacrylates monomer) in DURAFlex™ it is considered an allergy free material. An alternative to expensive metal partials or can be used in conjunction with metal partials for better aesthetics.

**DURAFlex is suitable for short to medium term use. Best used as a temporary solution to suitable patient cases. Not suitable for long term indications.** For longer term applications you are best to use a injectable flexible denture material that might be nylon based (Not available from Durodent).

Duraflex can be easily repaired. Material life and breakages can vary depending on stresses due to patient bite, design, thickness and patient care etc.

Life of material is variable depending on application and care. It offers patients a device with great comfort due to the material properties. Even though this material is for short to medium term indications often patient comfort outweighs material life.

## Pouring or Press-Packing a partial using DURAFlex flexible composite resin

*Information provided by Reliance Dental Manufacturing.*

DURAFlex flexible partial resin denture material is formulated to simplify the fabrication of partial dentures utilizing conventional laboratory techniques. The non-methylmethacrylate composite can be processed with either conventional press packing or pouring techniques without the use of special equipment.

Following are step-by-step procedures for pouring or press-packing a partial denture.

**For either procedure, sufficient diatoric holes MUST be drilled in teeth to ensure optimum retention.**

**This material requires sufficient diatoric holes in acrylic teeth to achieve mechanical retention. There is minimal chemical retention achieved with this material to the teeth as the chemical composition is different between the denture base and teeth.**

**Diatoric Holes:** Artificial tooth with holes at its base and extending into the body of the tooth through which the **denture** base material flows, serving as a mechanical means of attachment of the tooth to the **denture** base.

Fig. 1 shows the right side of the wax-up before processing.



**Fig. 1 Right side of wax up before processing.**

## Press-packing technique

1. Prepare denture mould using the flasking technique (Fig 2).



**Fig. 2 Wax up investment in flask. boil out and apply separator.**

2. Measure liquid using the 18cc scoop and add powder using the 29.6cc scoop in a mixing bowl, mix slowly (not creating bubbles) but thoroughly for 10 seconds. Ratio: 1 part liquid to 2 parts powder Note: DURAflex powder and liquid resin should be stored in the refrigerator and removed just prior to mixing

3. As soon as mix reaches a doughy state (5 to 6 minutes), pack into regular denture mould using press-packing procedures (Fig. 5).



**Fig. 5 Flask in pressing unit.**

4. **Cure for 2 hours in 53° C water.** ( 127°F)

**DO NOT cure at temperature above 53 ° C or mix will not cure properly.**

5. Cool for 15 minutes under cold running tap water.

6. Briefly place appliance in warm tap water before inserting into mouth or back on model for a better fit.

## Pouring Technique

1. Prepare a hydrocolloid mold in a pour flask in the regular manner
2. Measure liquid using the 18cc scoop and add powder using the 29.6cc scoop in a mixing bowl, mix slowly (not creating bubbles )but thoroughly for 10 seconds. Ratio: 1 part liquid to 2 parts powder  
Note: DURAflex powder and liquid resin should be stored in the refrigerator and removed just prior to mixing
3. Pour mixture in the usual manner
4. Cure in a pressure pot as soon as possible at **53° C water (127°F) and 20 psi for 45 minutes at 2 bar pressure.** **DO NOT cure at temperature above 53°C or mix will not cure properly.**
5. Remove the pour denture mould from the pressure pot and place under cold running tap water for 15 minutes before removing denture from pour mould.
- 6 . Briefly place appliance in warm tap water before inserting into mouth for a better fit

## Finish and Polish

After the initial steps for press-packing or pouring, finish and polish (Fig. 6).



**Fig. 6 Finishing the partial.**

Fig. 7 shows the right side of the finished partial on the model.



**Fig. 7 Finished partial on model.**

# Relining

In regards to relining DURAFlex just make sure the surface is clean and rub a little of the liquid on the surface then follow the curing instructions for a new job.

## ***DURAFlex FAQ***

- What type of impression material must be used?
  - A normal alginate impression material
- Can DURAFlex dentures be repaired?
  - Yes, repair with same material or normal rapid repair acrylic.
- What about relines?
  - Relines can be done with the DURAFlex material, but the correct curing process must be followed.
- If DURAFlex is not an acrylic, what is it?
  - DURAFlex is a modified composite resin.
- Why is it considered an allergy free material?
  - It contains NO methyl methacrylate monomer (MMA)
- Will a flexible partial denture not be a "gum stripper"?
  - Because of it's flexibility unnecessary stresses are greatly reduced on the remaining natural teeth and the partial becomes self-balancing.