

## ProTaper® Universal Guidelines and Pack Details:

ProTaper® Universal NiTi files economically combine speed, quality, simplicity and safety for shaping of root canals with both rotary files and hand files.

### ProTaper® Universal Rules:

- ProTaper® rotary files should be used at a constant speed between 150rpm and 350rpm (recommended: 250 rpm)
- The rotary files should be used in a specific endodontic motor with torque control such as the X-Smart™ Motor
- Always irrigate the canal before engaging a file
- Once working length is confirmed, use each file progressively down to the working length
- Use the shaping files (S1, S2 and SX) with a brushing motion. Brushing motion: Take the file passively to the point of light resistance and 'brush' out of the canal.
- Use the finishing files (F1-F5) in a 'in and out' action (not brushing)
- Withdraw the files once working length is reached
- Clean the files directly after use

### ProTaper® Universal Product Details:

ProTaper® Universal treatment files:

Available pack options:

- Starter pack (1x each of the following: S1, SX, S2, F1, F2 & F3)
- Three essentials pack (2 x each of the following: S1, S2 & F1)
- Individual refill packs (x6 files)

Available Lengths:

- 21mm, 25mm & 31mm
- (SX is 19mm)

Products in the ProTaper® Universal range include colour-coded:

- ProTaper® rotary treatment files
- ProTaper® for Hand Use treatment files
- ProTaper® paper points
- ProTaper® gutta percha points
- ProTaper® Thermanfil Obturators
- ProTaper® re-treatment files (D1, D2 & D3)

### Recommended hand file options for finding your glide path:

Calcified canals: C+Files:

- Ideal for finding a glide path in calcified or difficult to negotiate root canals
- Available in ISO sizes 008, 010 and 015
- Available in lengths 18mm, 21mm and 25mm

Sensus ProFinders:

- An alternative to using K-Flexofiles with a unique dual-taper for increased flexibility and easy penetration into the root canal
- Silcione handle for increased comfort and tactile feedback
- Available in ISO sizes 010, 013 and 017
- Available in lengths 18mm, 21mm and 25mm

K-Flexofiles:

- High quality stainless steel files
- Available in ISO sizes 008- 140
- Available in lengths 21mm, 25mm and 31mm

**DENTSPLY Limited** Hamm Moor Lane,  
Addlestone, Weybridge, Surrey KT15 2SE

Telephone +44 (0)1932 853422 (Endodontic)  
Or visit [www.dentsply.co.uk](http://www.dentsply.co.uk) | [www.dentsply.com](http://www.dentsply.com)

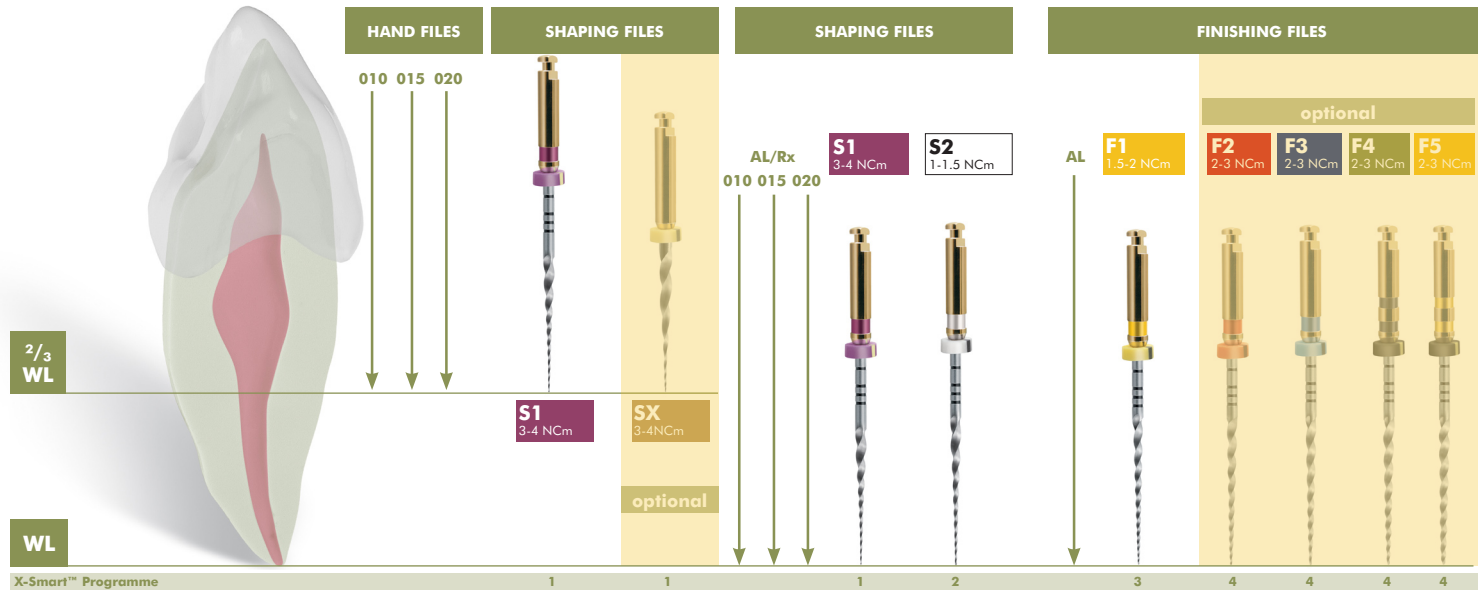
  
**PROTAPER®**  
UNIVERSAL

For better dentistry

**DENTSPLY**

**MAILEFER**

# ProTaper® Universal Protocol



## ProTaper® Universal Sequence (use at 250rpm)

- Fill pulp chamber with sodium hypochlorite
- Explore canal passively with ISO 010 FlexoFile (watch-winding action) to  $\frac{2}{3}$  of the estimated working length (EWL) as determined from a pre-op radiograph
- Repeat with 015 and 020 Flexofiles to create a glide path
- Use a lubricant such as Glyde™
- Irrigate between each file
- Use shaper file **S1**
- Use a 'brushing motion' until depth of the O20 is reached
- Recapitulate once or twice
- (Brushing motion: Take instrument to point of light resistance and "brush" out of the canal)
- If necessary, use **SX** passively in 'brushing motion': improves straight line access & relocates canal away from furcation.
- Re-irrigate
- Negotiate to EWL with a suitable Flexofile
- Establish patency
- Determine working length (WL) using the Ray-plex 5® apex locator (AL)
- Confirm radiographically (Rx)
- Take O15 and O20 to same length to confirm glide path
- Irrigate & use **S1** to WL
- Re-irrigate & take **S2** to WL (should go with ease)
- Re-confirm WL using Ray-plex 5®
- Irrigate & use Finishing file **F1** (O20), to WL & immediately withdraw
- Gauge apical foramen with O20 Flexofile
- If snug, obturate (ProTaper® Universal GP or Obturators)
- If loose, use **F2** (O25) and when necessary use **F3**/**F4**/**F5** (O30, O40 & O50)
- Irrigate & take a 010 Flexofile to WL to remove debris and ensure patency
- Finishing files are used in a straight in & out action (NOT brushing).