CLICK-IT®

WIRE SEQUENCE

Introduction to Click-It Philosophy

Phase Matching Technology

The Click-It Aesthetic Self-Ligating Bracket System incorporates a design philosophy of correctly matching the archwire-to-bracket frictional dynamic to the clinicians need at each phase of treatment. The Passive, Progressive, and Active archwire engagement modes of the bracket can be implemented as the clinician deems appropriate during patient treatment. The progression through the recommended wire sequence gives full phase matching functionality for treatment objectives.

Phase I Archwire Selection for Passive Ligation

The Click-It archwire slot incorporates a full four-walled tunnel for the wire to passively ligate to match the Phase I treatment objectives. In the passive condition the closed bracket forms a 0.022″ x 0.025″ tunnel that assists in expediting rotations. The passive archwire engagement keeps sliding friction to a minimum.

TP Orthodontics, Inc.

Innovators of Personalized Color-Matching Technology®

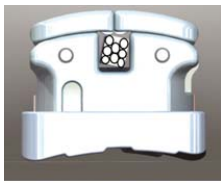
Suggested Phase I Archwire

Objectives

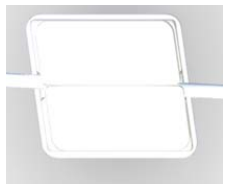
- Align and level
- Initial arch form development
- Correct rotations

The selection of the first Phase I archwire is largely dependent on the ability to keep the brackets fully closed (with or without the aid of an elastomeric or steel ligature) on the archwire. From the clinical evaluation of the case, select the archwire that matches the severity of the initial malocclusion. If you cannot get the bracket(s) to remain in the fully closed position then remove the archwire and select a braided rectangular wire with a lower force. The braided rectangular wires will stabilize the bracket closure on severe malocclusions or rotations of individual teeth. The 8-strand braided NiTi has a low torsional force value for minimizing the root torqueing applied by these low force archwires during Phase I of treatment, but enough to prevent dumping of the anteriors during aligning and leveling. For severe malocclusion cases the use of elastomeric or steel ligatures ties may be necessary to secure the archwire in the bracket until the next scheduled appointment. It is recommended to remove the ligatures as early as possible to minimize the sliding resistance.

Malocclusion Severity	Archwire* (Upper/Lower)	Bending Force First Order (grams)	Duration / Interval (weeks)
Severe	0.017" x. 0.025" Braided 8-strand NiTi (U/L) or 0.012" Round Reflex NiTi (U/L)	30 85	10-20 / 10
Moderate	0.021" x 0.025" Braided 8-strand NiTi** (U/L) or 0.014" Round Reflex NiTi (U/L)	85 or 133	10-20 / 10
Mild	0.021" x 0.025" Braided 8-strand NiTi** (U/L) or 0.016" - 0.018" Round Reflex NiTi (U/L)	85 or 165	10-12 / 6



Mesial-Distal View
0.017" x 0.025" Braided NiTi vs. 0.014" Round NiTi archwires during Phase I passive condition



Labial View, Phase I
Permissible 0.014" Wire Angle

Incisal View, Phase I
Permissible Wire Angle

Figures 2 and 3 show the permissible wire angles from the labial and occlusal views that still result in a low torque situation with a passive wire engagement.

Estimated in-stock date May 1, 2012.

**Aesthetic tooth-colored archwires by TPO provides a labial-only coated surface to avoid the high friction caused by notching associated with fully coated aesthetic wires.*

***The braided rectangular wire may need to be used in mild to moderate malocclusions if the rotations are still causing difficulty with the jaws remaining closed.*

Phase II Archwire Selection for Progressive Ligation

Objectives

- Complete aligning and leveling
- Correction of molar relationships / excessive or negative overjet
- Complete rotations
- Anterior space consolidation
- Torque control

Once unraveling is well underway and the rotations are nearly complete (90%) the Phase II archwires continue the progress toward the next objectives of treatment. During Phase II the Click-It bracket archwire slot takes on many demands that still require low friction for sliding mechanics. The Progressive mode of wire engagement facilitates continued arch form development and leveling, correction of molar relationships along with excessive or negative overjet, and closure of space. The archwire slot (four-walled tunnel) is still at the 0.022″ x 0.025″ size, but it will begin to adjust to the requirements of the archwire orientation and rotation. The spring that is centrally located at the floor of the archwire slot will begin to apply a gentle force to progressively activate the torsional effects of the archwires. The low forces provide continued low friction between the bracket and archwire for reduced sliding resistance.

Careful consideration should be given as to when to move into the Shiny Bright stainless steel archwires. Too early a progression may cause difficulty keeping the jaws closed as the bending force is significantly higher than the Reflex NiTi or the TiMolium archwires of the same dimensions. Arch shape should be nearly complete along with all rotations for effective stainless steel wire placement.

Sequence	Archwire* (Upper/Lower)	Bending Force First Order (grams)	Duration / Interval (weeks)
First	0.016″ x. 0.016″ TiMolium or 0.0175″ x 0.0175″ TiMolium	225 320	6-12 / 6
Second	0.016″ x 0.022″ Reflex NiTi (U/L) or 0.017″ x 0.025″ Reflex NiTi (U/L)	475 650	6 / 6
Third	0.019″ x 0.025″ Reflex NiTi (U/L) or 0.0215″ x 0.025″ Reflex NiTi (U/L)	750 810	6 / 6

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Phase III Archwire Selection for Active Ligation

Objectives

- Buccal / lingual and anterior posterior adjustments
- Finish torque control – root paralleling
- Coordination of the archform (patient specific)
- Midline adjustments
- Complete closure of extraction sites

This critical phase when the major mechanics of treatment are performed utilizes the Active Mode of the Click-It bracket slot. The large Stainless Steel wires are fully seated into the archwire slot by the end of Phase III and have active engagement for full expression of the bracket prescription. As the largest wires are seated the spring becomes coplanar with the ceramic ends of the slot, while the jaws exert a downward force on the archwire. This will maximize the torque control for root paralleling, but it does not lock down the wire into the archwire slot. The sliding is still allowed for space closures, correction of midline discrepancies, arch form coordination, and buccal/lingual and AP adjustments.

Finishing with Click-It

The active engagement utilized in Phase III nearly eliminates the amount of wire bending that is needed for individual tooth movements. Since the active mode of the Click-It bracket allows sliding with these large stainless steel wires, minute adjustments can be easily achieved.

The TPO Pre-Finisher® Appliance can be utilized after fixed appliance removal in order to eliminate extended intricate work.

Sequence	Archwire* (Upper/Lower)	Bending Force First Order (grams)	Duration / Interval (weeks)
First	0.016" x. 0.022" Shiny Bright Stainless Steel (U/L) or 0.017" x 0.025" Shiny Bright Stainless Steel (U/L)	990 1460	10-18 / 6
Second	0.017" x 0.025" Shiny Bright Stainless Steel (U/L) or 0.019" x 0.025" Shiny Bright Stainless Steel (U/L)	1460 1675	6 / 6
Third	0.0215" x 0.028" Shiny Bright Stainless Steel (U) or 0.0215" x 0.025" Shiny Bright Stainless Steel (L)	2050 1730	6-12 / 6

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