Because of their inherent instability, $\mathbf{6}_4$ chords are used only in very limited circumstances. You will find that they fall into four categories: cadential, passing, auxiliary (also commonly described as neighboring), and bass arpeggiation.

**The cadential $\mathbf{6}_4$**

This is the most common and also the most important variety of $\mathbf{6}_4$ chord. The cadential $\mathbf{6}_4$ functions as an elaboration of the dominant because it is really a root-position dominant chord with two non-harmonic tones (suspensions and/or passing tones). When these two non-harmonic tones resolve, we can clearly see the expected V chord. To convey the chord’s dominant function as well as its voice leading, the preferred label for the cadential $\mathbf{6}_4$ and its resolution is $V^6_4 - \mathbf{5}_3$. As its name suggests, this chord is especially common at cadences, but it can also be used in the middle of a phrase.

Other important things to remember:

- This chord almost invariably appears on a metrically strong beat, such as beat 1 or beat 3 in a quadruple meter. When it appears on a relatively weak beat, its resolution falls also on a weak beat. For instance, if the cadential $\mathbf{6}_4$ falls on beat 2 in a triple meter, then the resolution will almost surely fall on beat 3.
- As the figures clearly suggest, the two notes that are non-harmonic to V want to resolve down to their respective harmonic tones ($1^\flat$ wants to resolve down to $7^\sharp$, and $3^\flat$ wants to resolve down to $2^\flat$). Because $1^\flat$ is dissonant (lying a perfect fourth above the bass), it is a tendency tone and must resolve as expected. Because $3^\flat$ is consonant (lying either a major or minor sixth above the bass), irregular resolutions are less unusual.
- Although the bass may leap, expect to approach the cadential $\mathbf{6}_4$ with smooth voice-leading in the upper parts. It is particularly important not to leap into $1^\flat$ (the fourth above the bass) because, as a general rule, we don’t like to leap into dissonances.
- The best note to double is the bass, since this is the cadential $\mathbf{6}_4$’s only stable note. (Keep in mind that this is the true root of the chord!) Doubling $1^\flat$ (the fourth above the bass) is a serious mistake because this note is dissonant. Poor doubling is likely to lead to other mistakes such as parallel octaves. Doubling $3^\flat$ is quite unusual, although not impossible.

Below are some typical examples of cadential $\mathbf{6}_4$ chords.
**The passing $\text{IV}_4$**

This is the second most common variety of $\text{IV}_4$ chord. However, it is not a strong chord and has no real purpose except to lead between stronger and more important chords (almost always two tonic chords or two pre-dominant chords). To convey the passing $\text{IV}_4$’s marginal status, it is preferred simply to label the chord “$P_{\text{IV}_4}$” for several reasons: it is too weak to deserve its own Roman numeral, its root is essentially irrelevant, and it helps avoid confusion with the cadential $\text{IV}_6$. Alternatively, some people place the Roman numeral (either $V_{\text{IV}_4}$ or $I_{\text{IV}_4}$) within parentheses to convey the chord’s relative unimportance.

Other important things to remember:

- This chord always involves a stepwise bass line, and usually very smooth upper voices as well. Voice exchanges between the bass and an upper voice (frequently the soprano) are common. Leaps in the upper voices are unusual, and leaps in the bass are impossible.
- This chord tends to occur between two inversions of the same chord (e.g., I and I$^6$). Otherwise, it will connect two very similar chords (e.g., IV$^6$ and ii$^6$).
- Since the chord is weak and shouldn’t attract much attention, it is likely to fall on a metrically weak beat. The chord that immediately precedes the passing $\text{IV}_4$ will almost surely fall on a metrically strong beat (probably a downbeat).
- Doubling the bass will almost surely produce the best and smoothest voice-leading. Any other doubling is rare.
- Passing $\text{IV}_4$ chords almost always expand either the tonic function or the pre-dominant function. They almost never expand the dominant function (because there are other chords that better fulfil this role).

Below are some typical examples of passing $\text{IV}_4$ chords.

![Musical notation showing examples of passing $\text{IV}_4$ chords]

Don’t be alarmed by the inner voices: C-G♭♭ is a d5, so there are no parallel fifths!

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**The neighboring $\text{IV}_4$ (also known as the pedal $\text{IV}_4$ or the auxiliary $\text{IV}_4$)**

Although this chord is distinctly less common than either the cadential $\text{IV}_6$ or the passing $\text{IV}_4$, it is by no means unusual. Like the passing $\text{IV}_4$, this chord serves only to expand the chords around it. Like the cadential $\text{IV}_6$, it is really a root-position chord with two non-harmonic tones (upper neighbors); the chord tones we expect in the upper voices will almost always occur immediately before and after the $\text{IV}_4$ chord. To convey the neighboring $\text{IV}_4$ chord’s function as well as its voice leading, the preferred label involves the figures $\text{IV}_4: \text{IV}_6: \text{IV}_3$. 

Notice the voice exchanges that occur between the bass and some upper voice (often the melody).

When realizing this progression, the above melody is almost always best.
Other important things to remember:

- The neighboring \( \text{\textsuperscript{6}} \text{\textsuperscript{4}} \) involves a stationary bass line (and usually one stationary upper voice), while two upper voices step up and step back down again.
- It almost always expands either the tonic or the dominant. Expect to see a very typical root-position tonic or dominant chord both before and after the neighboring \( \text{\textsuperscript{6}} \text{\textsuperscript{4}} \).
- The best note to double is the bass, since this is the chord’s only stable note. Any other doubling is rare.
- Since the neighboring \( \text{\textsuperscript{6}} \text{\textsuperscript{4}} \) chord is weak and shouldn’t attract much attention, it is likely to fall on a metrically weak beat. The chord that immediately precedes it will almost surely fall on a metrically strong beat (probably a downbeat).

Below are some typical examples of neighboring \( \text{\textsuperscript{6}} \text{\textsuperscript{4}} \) chords.

\[
\begin{align*}
Bb: & \quad I & 5& & 6 & 5 & \quad b\flat: & \quad 1 & 5& & 6 & 5 \\
Bb: & \quad V & 5& & 6 & 5 & \quad b\flat: & \quad V & 5& & 6 & 5
\end{align*}
\]

**The bass arpeggiation \( \text{\textsuperscript{4}} \)**

Usually you will realize that these are not genuinely independent chords, but are instead a by-product of a vaguely melodic (or at least active) bass line. It is therefore usually most appropriate not to label such \( \text{\textsuperscript{4}} \) chords individually.

Below are some typical examples of bass arpeggiation \( \text{\textsuperscript{4}} \) chords.

\[
\begin{align*}
Bb: & \quad I & \quad \ldots & \quad Bb: & \quad V & \quad \ldots & \quad b\flat: & \quad i & \quad \ldots
\end{align*}
\]
One final example containing all types of $\frac{6}{4}$ chords

G: $I_3^5 = 6 \quad - \quad 5 \quad P_4^6 \quad I^6 \quad ii^6 \quad V_4^6 = 5 \quad I \quad ------