

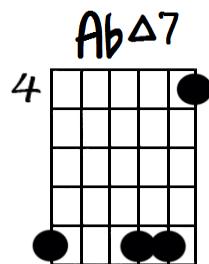
Method 3 Computer Completion by Quality

By James Hober

The following 43 tables are organized by chord quality. There is one table for each possible quality. First, tables for the eight highly dissonant qualities are shown. Then, tables for the 35 regular qualities, from mΔ9 no 5 to ⁹⁷, are shown. The interval content of **every** V-System chord has been used to construct these tables.

Before the tables is a complete list of the 43 qualities and their homonyms. You can use this list as a kind of table of contents.

To find the voicing group for a given V-System chord, determine the quality of the chord. Then go to the table for that quality. For example, we have a maj7 chord. So we go to the table for regular quality #16 CΔ7 = Am9 no R = FΔ9#11 no R, 3 = D13sus no R, 5 = B11b9+ no 3, b7.



Next, determine the interval between the outer voices of the chord (the bass to soprano interval). The possible intervals between the outer voices are shown in the top section of the table. You can use this section to reduce the number of possible voicing groups for the chord. Here we have an octave + a minor sixth between the outer voices. In the Δ7 table, that outer voice interval is found only in V-5, V-6, V13, and V-14. So we've narrowed our possibilities to these four voicing groups.

Next, look at the possible adjacent voice intervals in the lower section of the table. Our chord has a half step between the alto and soprano. V-6 and V-13 list the m2 as a possible A-S interval but V-5 and V-14 do not. We're down to two possibilities.

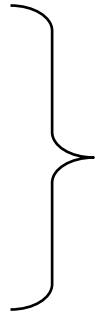
Our chord has a bass to tenor interval of an octave + m3. V-6 lists this as a possible B-T interval but V-13 does not. So we have found that our chord is a V-6.

To summarize:

- Chord quality → table
- Bass to Soprano interval → top section of the table narrows the possible voicing groups
- Adjacent voice intervals → lower section of the table pinpoints the voicing group

The 43 Four-Note Chord Qualities

- 1) 1 - 1 - 1 - 9
- 2) 1 - 1 - 2 - 8
- 3) 1 - 1 - 3 - 7
- 4) 1 - 1 - 4 - 6
- 5) 1 - 1 - 5 - 5
- 6) 1 - 1 - 6 - 4
- 7) 1 - 1 - 7 - 3
- 8) 1 - 1 - 8 - 2



The eight very dissonant qualities containing two neighboring half steps.

- 1) 1 - 2 - 1 - 8 CmΔ9 no 5 = D13b9 no 3, 5 = B(7) #9b9 no 5 = F7/6 / #11 no 1, 3 = Ab(7) #9#11 no R, b7 = Eb°Δ7+ no b3, b5 = F#°/11+ no R, b3 = A°/9/11 no R, 6
- 2) 1 - 2 - 2 - 7 CΔ9 no 5 = D13 no 3, 5 = Am/9/11 no R = Ab(7) #9b5+ no R, b7 = FΔ7/6 / #11 no R, 3
- 3) 1 - 2 - 3 - 6 C7/11 no R = Gm7/6 no 5 = FΔ9sus no 5 = Bb6#11 no 3 = E(7) #9b9b5 no 3, b7 = Db13#9b5 no R, b7 = Dm+/9/11 no R
- 4) 1 - 2 - 4 - 5 C7/6 no 5 = Gb7#9b5 no R = BbΔ9#11 no 3, 5 = Gm13 no R, 5, b7 = A(7) #9b9 no 3, b7 = FΔ7/11 no R
- 5) 1 - 2 - 5 - 4 CΔ9 no 3 = Am11 no R, 5 = D7/6sus no 5 = Gadd11 = F6/9 / #11 no R, 3 = B(7) #9b9+ no 3, b7
- 6) 1 - 2 - 6 - 3 C(7) #9b5 no b7 = C° add \natural 3 = Gb7/6/b5 no 3 = B11b9 no R, b7 = C#mΔ9/11 no R, 5 = EΔ9+ no 3 = Bb°9+/11 no R, b3, 6 = G°Δ7+/11 no R, b3, b5
- 7) 1 - 2 - 7 - 2 C7/6 no 3 = Gm/9/11 = BbΔ13 no 3, 5 = A7#9b9 no 3, 5 = F11 no R, b7 = Gb(7) #9b9b5 no R, b7 = Eb6#11 no R = E°+/11 no R, 6 = C#° Δ7+ no R, b3
- 8) 1 - 3 - 1 - 7 C11b9 no 5, b7 = Bbm/9 / #11 no R, b7 = DbΔ7#9 no 5
- 9) 1 - 3 - 2 - 6 C7#11 no 3 = D11+ no R, 9 = A13#9b9 no R, 3, 5 = Gb(7)b9b5 no b7 = GmΔ7/11 no 5 = Eb(7)/6 / #9 no R, b7 = E°9+ no R, 6 = Bb°9+ no b3, b5
- 10) 1 - 3 - 3 - 5 C7#9 no R = Gb13b9 no R, 5 = A7b9#11 no R, 3 = Eb(7)b9 no b7 = C#m6/9 / #11 no R, 5 = EmΔ7b5 = E°Δ7 = Gb°7+ no b5 = Bb°7/11 no b3
- 11) 1 - 3 - 4 - 4 CmΔ7 = Am9b5 no R = D13b9sus no R, 5 = F9#11 no R, 3 = B(7)b9+ no b7

- 12) 1 - 3 - 5 - 3** C with 3 and b3 = Gb13b9b5 no R, 3 = Eb13b9 no 5, b7 = B11b9+ no R, b7 = Am7/#11 no R = E°9+ no R, 6 = Db°Δ9 no R, 6 = Bb°9/11 no R, b3 = G°+/11 no b3, b5
- 13) 1 - 3 - 6 - 2** C7b9 no 5 = Eb13b9 no R, 3 = Gb7#11 no R = A(7)#9b9 no R, b7 = Ab11+ no R, b7 = Bb°/9 = G°7/11 no R = E°7+ no b3 = C#m6Δ7 no 5
- 14) 1 - 4 - 1 - 6** CΔ7#11 no 3 = Am13 no R, 5 = D7/6/11 no R, 5 = Eb13#9+ no R, b7 = GΔ7/11 no 5
- 15) 1 - 4 - 2 - 5** C13 no R, 5 = Gm6/9 no R = BbΔ7#11 no 5 = Gb7#9+ no R = A(7)b9sus no b7
- 16) 1 - 4 - 3 - 4** CΔ7 = Am9 no R = FΔ9#11 no R, 3 = D13sus no R, 5 = B11b9+ no 3, b7
- 17) 1 - 4 - 4 - 3** CmΔ9 no R = F13b5 no R, 3 = EbΔ7+ = B(7)#9+ no b7 = Bb/11/13/b9 no R, 5
- 18) 1 - 4 - 5 - 2** Cm/9 = F13 no R, 3 = AbΔ7#11 no R = D11b9 no 3, 5 = Eb6Δ7 no R = B(7)#9b9+ no R, b7 = Gb13b9b5+ no R, 3, b7
- 19) 1 - 5 - 1 - 5** C13#9 no R, 5 = Gb13#9 no R, 5
- 20) 1 - 5 - 2 - 4** C7/11 no 5 = FΔ7sus = Dm9+ = Gm7/6/11 no R, 5 = Bb/9/#11 no 3 = E(7)b9b5+ no 3, b7
- 21) 1 - 5 - 3 - 3** C11b9 no R, 5 = Bbm/#11 = E13b9b5 no 3, 5, b7 = Gm7b5/6 no R, 5
- 22) 1 - 5 - 4 - 2** C11 no R, 5 = E7b9b5 no 3 = Bb/#11 = Dm/9+ = Gm7/6 no R = Db13#9b9 no R, 5, b7 = FΔ7/6sus no 5 = G#°9+ no R, 3 = B°Δ7/11 no R
- 23) 1 - 6 - 2 - 3** C7#9 no 5 = Gb7/6/#11 no R, 5 = C#mΔ13 no R, 5 = Eb13b9 no 3, b7 = A(7)#9b9#11 no R, 3, b7 = E°Δ7+ no b3 = Bb°9/11 no b3, 6 = G°/11+ no R, b5
- 24) 1 - 6 - 3 - 2** Cm6/9 no 5 = F7/6 no R = D7b9 no 3 = B7#9b9 no R, 5 = EbΔ7/6/#11 no 3, 5 = A°/11 = F#°7+ no R
- 25) 1 - 7 - 2 - 2** Cm9 no 5 = D7b9+ no 3 = Eb7/6sus no R = Bb/9sus no 5 = DbΔ7/6 no 3 = Ab/9/#11 no R
- 26) 2 - 2 - 2 - 6** C9 no 5 = F#7b5+ no R = D9+ no 3 = Gb7b5+ no R = E7b5+ no 3 = Ab9b5+ no R, b7 = Bb/9/#11 no 5
- 27) 2 - 2 - 3 - 5** C/9 = Am7/11 no R = D11 no 3, 5 = Em7+ = FΔ13 no R, 3 = Gb7b9b5+ no R, 3 = Bb6/9/#11 no R, 5 = G6sus = B(7)#9b9sus+ no R, b7

- 28) 2 - 2 - 4 - 4 C7+ = F#9b5 no R = Bb9b5 no 3 = D9b5+ no R, 3 = E with #5 & b5 = Ab/9+
- 29) 2 - 2 - 5 - 3 C6/9 no 5 = D9 no 3 = BbΔ9#11 no R, 5 = Am/11 = Gb7#9b5+ no R, 3 = E7sus+ = B7#9b9sus no R, 5 = Ab(7)b9b5+ no R, b7 = FΔ7/6 no R = G6/9sus no R
- 30) 2 - 3 - 2 - 5 C6/9 no R = G6/9 no 3 = A7sus = Em7/11 no 5 = FΔ13 no R, 5 = D/9sus = BbΔ7/6/#11 no R, 5 = Db(7)#9b9b5+ no R, 3, b7 = F#7#9b9+ no R, 3
- 31) 2 - 3 - 3 - 4 Cm7b5 = Ab9 no R = Ebm6 = D7b9+ no R = F11b9 no R, 3 = Gb6/#11 no 5 = DbΔ13sus no R, 5
- 32) 2 - 3 - 4 - 3 Cm7 = Eb6 = AbΔ9 no R = F11 no R, 3 = DbΔ13#11 no R, 3, 5 = Bb6/9sus no 5 = A7#9b9b5 no R, 3 = D11b9+ no R, 3 = G°+/11
- 33) 2 - 4 - 2 - 4 C7b5 = F#7b5 = D9+ no R = Ab9+ no R = E9b5+ no 3, b7 = Bb9b5+ no 3, b7
- 34) 2 - 4 - 3 - 3 C7 = F#7b9b5 no R = A7#9b9 no R, 3 = E(7)#9b5+ no 3, b7 = Eb13b9 no R, b7 = Bb6/9/#11 no 3, 5 = FΔ9sus no R
- 35) 3 - 3 - 3 - 3 C°7 = A°7 = F#°7 = Eb°7 = B7b9 no R = Ab7b9 no R = F7b9 no R = D7b9 no R = Db all four ° extensions = Bb all 4 ° ext. = G all 4 ° ext. = E all 4 ° ext.

Method 3 Tables by Quality

#1 The most dissonant quality containing three neighboring half steps.
The intervals in this table are also the smallest and largest possible for all V-groups.

Number of half steps between chord tones: 1 - 1 - 1 - 9

Possible intervals between the outer voices (B-S):

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V-1: m3, M7
V-2: 1 octave + m2, 1 octave + M6
V-3, V-4: 1 octave + M2, 1 octave + m7
V-5, V-6, V13, V-14: 1 octave + m3, 1 octave + M7
V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M6
V-11, V-12: 2 octaves + M2, 2 octaves + m7

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Possible intervals between adjacent pairs of voices:

V-1	A-S: m2, M6 T-A: m2, M6 B-T: m2, M6
V-2	A-S: M2, m7 T-A: m2, M6 B-T: M2, m7
V-3	A-S: m3, M7 T-A: M2, m7 B-T: m2, M6
V-4	A-S: m2, M6 T-A: M2, m7 B-T: m3, M7
V-5	A-S: M2, m7 T-A: m3, M7 B-T: M2, m7
V-6	A-S: m2, M6 T-A: m2, M6 B-T: 1 octave + m2, 1 octave + M6
V-7	A-S: M2, m7 T-A: m2, M6 B-T: 1 octave + M2, 1 octave + m7
V-8	A-S: m3, M7 T-A: m3, M7 B-T: m3, M7
V-9	A-S: 1 octave + M2, 1 octave + m7 T-A: m2, M6 B-T: M2, m7
V-10	A-S: M2, m7 T-A: 1 octave + m2, 1 octave + M6 B-T: M2, m7
V-11	A-S: 1 octave + m2, 1 octave + M6 T-A: M2, m7 B-T: m3, M7
V-12	A-S: m3, M7 T-A: M2, m7 B-T: 1 octave + m2, 1 octave + M6
V-13	A-S: m2, M6 T-A: 1 octave + m2, 1 octave + M6 B-T: m2, M6
V-14	A-S: 1 octave + m2, 1 octave + M6 T-A: m2, M6 B-T: m2, M6

#2 One of the eight very dissonant qualities containing two neighboring half steps.

Number of half steps between chord tones: 1 - 1 - 2 - 8

Possible intervals between the outer voices (B-S):

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V-1: M3, m7, M7
V-2: 1 octave + m2, 1 octave + M2, 1 octave + m6
V-3, V-4: 1 octave + M2, 1 octave + m3, 1 octave + M6, 1 octave + m7
V-5, V-6, V13, V-14: 1 octave + M3, 1 octave + m7, 1 octave + M7
V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + m6
V-11, V-12: 2 octaves + M2, 2 octaves + m3, 2 octaves + M6, 2 octaves + m7

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Possible intervals between adjacent pairs of voices:

V-1	A-S: m2, M2, m6 T-A: m2, M2, m6 B-T: m2, M2, m6
V-2	A-S: M2, m3, M6, m7 T-A: m2, M2, m6 B-T: M2, m3, M6, m7
V-3	A-S: M3, m7, M7 T-A: M2, m3, M6, m7 B-T: m2, M2, m6
V-4	A-S: m2, M2, m6 T-A: M2, m3, M6, m7 B-T: M3, m7, M7
V-5	A-S: M2, m3, M6, m7 T-A: M3, m7, M7 B-T: M2, m3, M6, m7
V-6	A-S: m2, M2, m6 T-A: m2, M2, m6 B-T: 1 octave + m2, 1 octave + M2, 1 octave + m6
V-7	A-S: M2, m3, M6, m7 T-A: m2, M2, m6 B-T: 1 octave + M2, 1 octave + m3, 1 octave + M6, 1 octave + m7
V-8	A-S: M3, m7, M7 T-A: M3, m7, M7 B-T: M3, m7, M7
V-9	A-S: 1 octave + M2, 1 octave + m3, 1 octave + M6, 1 octave + m7 T-A: m2, M2, m6 B-T: M2, m3, M6, m7
V-10	A-S: M2, m3, M6, m7 T-A: 1 octave + m2, 1 octave + M2, 1 octave + m6 B-T: M2, m3, M6, m7
V-11	A-S: 1 octave + m2, 1 octave + M2, 1 octave + m6 T-A: M2, m3, M6, m7 B-T: M3, m7, M7
V-12	A-S: M3, m7, M7 T-A: M2, m3, M6, m7 B-T: 1 octave + m2, 1 octave + M2, 1 octave + m6
V-13	A-S: m2, M2, m6 T-A: 1 octave + m2, 1 octave + M2, 1 octave + m6 B-T: m2, M2, m6
V-14	A-S: 1 octave + m2, 1 octave + M2, 1 octave + m6 T-A: m2, M2, m6 B-T: m2, M2, m6

#3 One of the eight very dissonant qualities containing two neighboring half steps.

Number of half steps between chord tones: 1 - 1 - 3 - 7

Possible intervals between the outer voices (B-S):

V-1: P4, M6, M7
 V-2: 1 octave + m2, 1 octave + m3, 1 octave + P5
 V-3, V-4: 1 octave + M2, 1 octave + M3, 1 octave + m6, 1 octave + m7
 V-5, V-6, V13, V-14: 1 octave + P4, 1 octave + M6, 1 octave + M7
 V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + m3, 2 octaves + P5
 V-11, V-12: 2 octaves + M2, 2 octaves + M3, 2 octaves + m6, 2 octaves + m7

Possible intervals between adjacent pairs of voices:

V-1	A-S: m2, m3, P5 T-A: m2, m3, P5 B-T: m2, m3, P5
V-2	A-S: M2, M3, m6, m7 T-A: m2, m3, P5 B-T: M2, M3, m6, m7
V-3	A-S: P4, M6, M7 T-A: M2, M3, m6, m7 B-T: m2, m3, P5
V-4	A-S: m2, m3, P5 T-A: M2, M3, m6, m7 B-T: P4, M6, M7
V-5	A-S: M2, M3, m6, m7 T-A: P4, M6, M7 B-T: M2, M3, m6, m7
V-6	A-S: m2, m3, P5 T-A: m2, m3, P5 B-T: 1 octave + m2, 1 octave + m3, 1 octave + P5
V-7	A-S: M2, M3, m6, m7 T-A: m2, m3, P5 B-T: 1 octave + M2, 1 octave + M3, 1 octave + m6, 1 octave + m7
V-8	A-S: P4, M6, M7 T-A: P4, M6, M7 B-T: P4, M6, M7
V-9	A-S: 1 octave + M2, 1 octave + M3, 1 octave + m6, 1 octave + m7 T-A: m2, m3, P5 B-T: M2, M3, m6, m7
V-10	A-S: M2, M3, m6, m7 T-A: 1 octave + m2, 1 octave + m3, 1 octave + P5 B-T: M2, M3, m6, m7
V-11	A-S: 1 octave + m2, 1 octave + m3, 1 octave + P5 T-A: M2, M3, m6, m7 B-T: P4, M6, M7
V-12	A-S: P4, M6, M7 T-A: M2, M3, m6, m7 B-T: 1 octave + m2, 1 octave + m3, 1 octave + P5
V-13	A-S: m2, m3, P5 T-A: 1 octave + m2, 1 octave + m3, 1 octave + P5 B-T: m2, m3, P5
V-14	A-S: 1 octave + m2, 1 octave + m3, 1 octave + P5 T-A: m2, m3, P5 B-T: m2, m3, P5

#4 One of the eight very dissonant qualities containing two neighboring half steps.

Number of half steps between chord tones: 1 - 1 - 4 - 6

Possible intervals between the outer voices (B-S):

V-1: Aug4, m6, M7

V-2: 1 octave + m2, 1 octave + M3, 1 octave + Aug4

V-3, V-4: 1 octave + M2, 1 octave + P4, 1 octave + P5, 1 octave + m7

V-5, V-6, V13, V-14: 1 octave + Aug4, 1 octave + m6, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M3, 2 octaves + Aug4

V-11, V-12: 2 octaves + M2, 2 octaves + P4, 2 octaves + P5, 2 octaves + m7

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M3, Aug4
T-A: m2, M3, Aug4
B-T: m2, M3, Aug4

V-2 A-S: M2, P4, P5, m7
T-A: m2, M3, Aug4
B-T: M2, P4, P5, m7

V-3 A-S: Aug4, m6, M7
T-A: M2, P4, P5, m7
B-T: m2, M3, Aug4

V-4 A-S: m2, M3, Aug4
T-A: M2, P4, P5, m7
B-T: Aug4, m6, M7

V-5 A-S: M2, P4, P5, m7
T-A: Aug4, m6, M7
B-T: M2, P4, P5, m7

V-6 A-S: m2, M3, Aug4
T-A: m2, M3, Aug4
B-T: 1 octave + m2, 1 octave + M3, 1 octave + Aug4

V-7 A-S: M2, P4, P5, m7
T-A: m2, M3, Aug4
B-T: 1 octave + M2, 1 octave + P4, 1 octave + P5, 1 octave + m7

V-8 A-S: Aug4, m6, M7
T-A: Aug4, m6, M7
B-T: Aug4, m6, M7

V-9 A-S: 1 octave + M2, 1 octave + P4, 1 octave + P5, 1 octave + m7
T-A: m2, M3, Aug4
B-T: M2, P4, P5, m7

V-10 A-S: M2, P4, P5, m7
T-A: 1 octave + m2, 1 octave + M3, 1 octave + Aug4
B-T: M2, P4, P5, m7

V-11 A-S: 1 octave + m2, 1 octave + M3, 1 octave + Aug4
T-A: M2, P4, P5, m7
B-T: Aug4, m6, M7

V-12 A-S: Aug4, m6, M7
T-A: M2, P4, P5, m7
B-T: 1 octave + m2, 1 octave + M3, 1 octave + Aug4

V-13 A-S: m2, M3, Aug4
T-A: 1 octave + m2, 1 octave + M3, 1 octave + Aug4
B-T: m2, M3, Aug4

V-14 A-S: 1 octave + m2, 1 octave + M3, 1 octave + Aug4
T-A: m2, M3, Aug4
B-T: m2, M3, Aug4

#5 One of the eight very dissonant qualities containing two neighboring half steps.

Number of half steps between chord tones: 1 - 1 - 5 - 5

Possible intervals between the outer voices (B-S):

V-1:	P5, M7
V-2:	1 octave + m2, 1 octave + P4
V-3, V-4:	1 octave + M2, 1 octave + Aug4, 1 octave + m7
V-5, V-6, V13, V-14:	1 octave + P5, 1 octave + M7
V-7, V-8, V-9, V-10:	2 octaves + m2, 2 octaves + P4
V-11, V-12:	2 octaves + M2, 2 octaves + Aug4, 2 octaves + m7

Possible intervals between adjacent pairs of voices:

V-1	A-S: m2, P4 T-A: m2, P4 B-T: m2, P4
V-2	A-S: M2, Aug4, m7 T-A: m2, P4 B-T: M2, Aug4, m7
V-3	A-S: P5, M7 T-A: M2, Aug4, m7 B-T: m2, P4
V-4	A-S: m2, P4 T-A: M2, Aug4, m7 B-T: P5, M7
V-5	A-S: M2, Aug4, m7 T-A: P5, M7 B-T: M2, Aug4, m7
V-6	A-S: m2, P4 T-A: m2, P4 B-T: 1 octave + m2, 1 octave + P4
V-7	A-S: M2, Aug4, m7 T-A: m2, P4 B-T: 1 octave + M2, 1 octave + Aug4, 1 octave + m7
V-8	A-S: P5, M7 T-A: P5, M7 B-T: P5, M7
V-9	A-S: 1 octave + M2, 1 octave + Aug4, 1 octave + m7 T-A: m2, P4 B-T: M2, Aug4, m7
V-10	A-S: M2, Aug4, m7 T-A: 1 octave + m2, 1 octave + P4 B-T: M2, Aug4, m7
V-11	A-S: 1 octave + m2, 1 octave + P4 T-A: M2, Aug4, m7 B-T: P5, M7
V-12	A-S: P5, M7 T-A: M2, Aug4, m7 B-T: 1 octave + m2, 1 octave + P4
V-13	A-S: m2, P4 T-A: 1 octave + m2, 1 octave + P4 B-T: m2, P4
V-14	A-S: 1 octave + m2, 1 octave + P4 T-A: m2, P4 B-T: m2, P4

#6 One of the eight very dissonant qualities containing two neighboring half steps.

Number of half steps between chord tones: 1 - 1 - 6 - 4

Possible intervals between the outer voices (B-S):

V-1: Aug4, m6, M7

V-2: 1 octave + m2, 1 octave + M3, 1 octave + Aug4

V-3, V-4: 1 octave + M2, 1 octave + P4, 1 octave + P5, 1 octave + m7

V-5, V-6, V13, V-14: 1 octave + Aug4, 1 octave + m6, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M3, 2 octaves + Aug4

V-11, V-12: 2 octaves + M2, 2 octaves + P4, 2 octaves + P5, 2 octaves + m7

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M3, Aug4
T-A: m2, M3, Aug4
B-T: m2, M3, Aug4

V-2 A-S: M2, P4, P5, m7
T-A: m2, M3, Aug4
B-T: M2, P4, P5, m7

V-3 A-S: Aug4, m6, M7
T-A: M2, P4, P5, m7
B-T: m2, M3, Aug4

V-4 A-S: m2, M3, Aug4
T-A: M2, P4, P5, m7
B-T: Aug4, m6, M7

V-5 A-S: M2, P4, P5, m7
T-A: Aug4, m6, M7
B-T: M2, P4, P5, m7

V-6 A-S: m2, M3, Aug4
T-A: m2, M3, Aug4
B-T: 1 octave + m2, 1 octave + M3, 1 octave + Aug4

V-7 A-S: M2, P4, P5, m7
T-A: m2, M3, Aug4
B-T: 1 octave + M2, 1 octave + P4, 1 octave + P5, 1 octave + m7

V-8 A-S: Aug4, m6, M7
T-A: Aug4, m6, M7
B-T: Aug4, m6, M7

V-9 A-S: 1 octave + M2, 1 octave + P4, 1 octave + P5, 1 octave + m7
T-A: m2, M3, Aug4
B-T: M2, P4, P5, m7

V-10 A-S: M2, P4, P5, m7
T-A: 1 octave + m2, 1 octave + M3, 1 octave + Aug4
B-T: M2, P4, P5, m7

V-11 A-S: 1 octave + m2, 1 octave + M3, 1 octave + Aug4
T-A: M2, P4, P5, m7
B-T: Aug4, m6, M7

V-12 A-S: Aug4, m6, M7
T-A: M2, P4, P5, m7
B-T: 1 octave + m2, 1 octave + M3, 1 octave + Aug4

V-13 A-S: m2, M3, Aug4
T-A: 1 octave + m2, 1 octave + M3, 1 octave + Aug4
B-T: m2, M3, Aug4

V-14 A-S: 1 octave + m2, 1 octave + M3, 1 octave + Aug4
T-A: m2, M3, Aug4
B-T: m2, M3, Aug4

#7 One of the eight very dissonant qualities containing two neighboring half steps.

Number of half steps between chord tones: 1 - 1 - 7 - 3

Possible intervals between the outer voices (B-S):

```

V-1: P4, M6, M7
V-2: 1 octave + m2, 1 octave + m3, 1 octave + P5
V-3, V-4: 1 octave + M2, 1 octave + M3, 1 octave + m6, 1 octave + m7
V-5, V-6, V13, V-14: 1 octave + P4, 1 octave + M6, 1 octave + M7
V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + m3, 2 octaves + P5
V-11, V-12: 2 octaves + M2, 2 octaves + M3, 2 octaves + m6, 2 octaves + m7

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Possible intervals between adjacent pairs of voices:

V-1	A-S: m2, m3, P5 T-A: m2, m3, P5 B-T: m2, m3, P5
V-2	A-S: M2, M3, m6, m7 T-A: m2, m3, P5 B-T: M2, M3, m6, m7
V-3	A-S: P4, M6, M7 T-A: M2, M3, m6, m7 B-T: m2, m3, P5
V-4	A-S: m2, m3, P5 T-A: M2, M3, m6, m7 B-T: P4, M6, M7
V-5	A-S: M2, M3, m6, m7 T-A: P4, M6, M7 B-T: M2, M3, m6, m7
V-6	A-S: m2, m3, P5 T-A: m2, m3, P5 B-T: 1 octave + m2, 1 octave + m3, 1 octave + P5
V-7	A-S: M2, M3, m6, m7 T-A: m2, m3, P5 B-T: 1 octave + M2, 1 octave + M3, 1 octave + m6, 1 octave + m7
V-8	A-S: P4, M6, M7 T-A: P4, M6, M7 B-T: P4, M6, M7
V-9	A-S: 1 octave + M2, 1 octave + M3, 1 octave + m6, 1 octave + m7 T-A: m2, m3, P5 B-T: M2, M3, m6, m7
V-10	A-S: M2, M3, m6, m7 T-A: 1 octave + m2, 1 octave + m3, 1 octave + P5 B-T: M2, M3, m6, m7
V-11	A-S: 1 octave + m2, 1 octave + m3, 1 octave + P5 T-A: M2, M3, m6, m7 B-T: P4, M6, M7
V-12	A-S: P4, M6, M7 T-A: M2, M3, m6, m7 B-T: 1 octave + m2, 1 octave + m3, 1 octave + P5
V-13	A-S: m2, m3, P5 T-A: 1 octave + m2, 1 octave + m3, 1 octave + P5 B-T: m2, m3, P5
V-14	A-S: 1 octave + m2, 1 octave + m3, 1 octave + P5 T-A: m2, m3, P5 B-T: m2, m3, P5

#8 One of the eight very dissonant qualities containing two neighboring half steps.

Number of half steps between chord tones: 1 - 1 - 8 - 2

Possible intervals between the outer voices (B-S):

V-1: M3, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + m6

V-3, V-4: 1 octave + M2, 1 octave + m3, 1 octave + M6, 1 octave + m7

V-5, V-6, V13, V-14: 1 octave + M3, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + m6

V-11, V-12: 2 octaves + M2, 2 octaves + m3, 2 octaves + M6, 2 octaves + m7

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, m6
T-A: m2, M2, m6
B-T: m2, M2, m6

V-2 A-S: M2, m3, M6, m7
T-A: m2, M2, m6
B-T: M2, m3, M6, m7

V-3 A-S: M3, m7, M7
T-A: M2, m3, M6, m7
B-T: m2, M2, m6

V-4 A-S: m2, M2, m6
T-A: M2, m3, M6, m7
B-T: M3, m7, M7

V-5 A-S: M2, m3, M6, m7
T-A: M3, m7, M7
B-T: M2, m3, M6, m7

V-6 A-S: m2, M2, m6
T-A: m2, M2, m6
B-T: 1 octave + m2, 1 octave + M2, 1 octave + m6

V-7 A-S: M2, m3, M6, m7
T-A: m2, M2, m6
B-T: 1 octave + M2, 1 octave + m3, 1 octave + M6, 1 octave + m7

V-8 A-S: M3, m7, M7
T-A: M3, m7, M7
B-T: M3, m7, M7

V-9 A-S: 1 octave + M2, 1 octave + m3, 1 octave + M6, 1 octave + m7
T-A: m2, M2, m6
B-T: M2, m3, M6, m7

V-10 A-S: M2, m3, M6, m7
T-A: 1 octave + m2, 1 octave + M2, 1 octave + m6
B-T: M2, m3, M6, m7

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m6
T-A: M2, m3, M6, m7
B-T: M3, m7, M7

V-12 A-S: M3, m7, M7
T-A: M2, m3, M6, m7
B-T: 1 octave + m2, 1 octave + M2, 1 octave + m6

V-13 A-S: m2, M2, m6
T-A: 1 octave + m2, 1 octave + M2, 1 octave + m6
B-T: m2, M2, m6

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m6
T-A: m2, M2, m6
B-T: m2, M2, m6

#1 CmΔ9 no 5 = D13b9 no 3, 5 = B(7) #9b9 no 5 = F7/6/#11 no 1, 3 = Ab(7) #9#11 no R, b7 = Eb°Δ7+ no b3, b5 = F#°/11+ no R, b3 = A°/9/11 no R, 6

Number of half steps between chord tones: 1 - 2 - 1 - 8

Possible intervals between the outer voices (B-S):

V-1: M3, m7, M7
V-2: 1 octave + m2, 1 octave + M2, 1 octave + m6

V-3, V-4: 1 octave + m3, 1 octave + M6

V-5, V-6, V13, V-14: 1 octave + M3, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + m6
V-11, V-12: 2 octaves + m3, 2 octaves + M6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, m6
T-A: m2, M2, m6
B-T: m2, M2, m6

V-2 A-S: m3, M6
T-A: m2, M2, m6
B-T: m3, M6

V-3 A-S: M3, m7, M7
T-A: m3, M6
B-T: m2, M2, m6

V-4 A-S: m2, M2, m6
T-A: m3, M6
B-T: M3, m7, M7

V-5 A-S: m3, M6
T-A: M3, m7, M7
B-T: m3, M6

V-6 A-S: m2, M2, m6
T-A: m2, M2, m6
B-T: 1 octave + m2, 1 octave + M2, 1 octave + m6

V-7 A-S: m3, M6
T-A: m2, M2, m6
B-T: 1 octave + m3, 1 octave + M6

V-8 A-S: M3, m7, M7
T-A: M3, m7, M7
B-T: M3, m7, M7

V-9 A-S: 1 octave + m3, 1 octave + M6
T-A: m2, M2, m6
B-T: m3, M6

V-10 A-S: m3, M6
T-A: 1 octave + m2, 1 octave + M2, 1 octave + m6
B-T: m3, M6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m6
T-A: m3, M6
B-T: M3, m7, M7

V-12 A-S: M3, m7, M7
T-A: m3, M6
B-T: 1 octave + m2, 1 octave + M2, 1 octave + m6

V-13 A-S: m2, M2, m6
T-A: 1 octave + m2, 1 octave + M2, 1 octave + m6
B-T: m2, M2, m6

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m6
T-A: m2, M2, m6
B-T: m2, M2, m6

#2 CΔ9 no 5 = D13 no 3, 5 = Am/9/11 no R = Ab(7) #9b5+ no R, b7 = FΔ7/6/#11 no R, 3

Number of half steps between chord tones: 1 - 2 - 2 - 7

Possible intervals between the outer voices (B-S):

V-1: P4, m7, M7
 V-2: 1 octave + m2, 1 octave + M2, 1 octave + P5
 V-3, V-4: 1 octave + m3, 1 octave + M3, 1 octave + m6, 1 octave + M6

V-5, V-6, V13, V-14: 1 octave + P4, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + P5

V-11, V-12: 2 octaves + m3, 2 octaves + M3, 2 octaves + m6, 2 octaves + M6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, P5
 T-A: m2, M2, P5
 B-T: m2, M2, P5

V-2 A-S: m3, M3, m6, M6
 T-A: m2, M2, P5
 B-T: m3, M3, m6, M6

V-3 A-S: P4, m7, M7
 T-A: m3, M3, m6, M6
 B-T: m2, M2, P5

V-4 A-S: m2, M2, P5
 T-A: m3, M3, m6, M6
 B-T: P4, m7, M7

V-5 A-S: m3, M3, m6, M6
 T-A: P4, m7, M7
 B-T: m3, M3, m6, M6

V-6 A-S: m2, M2, P5
 T-A: m2, M2, P5
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + P5

V-7 A-S: m3, M3, m6, M6
 T-A: m2, M2, P5
 B-T: 1 octave + m3, 1 octave + M3, 1 octave + m6, 1 octave + M6

V-8 A-S: P4, m7, M7
 T-A: P4, m7, M7
 B-T: P4, m7, M7

V-9 A-S: 1 octave + m3, 1 octave + M3, 1 octave + m6, 1 octave + M6
 T-A: m2, M2, P5
 B-T: m3, M3, m6, M6

V-10 A-S: m3, M3, m6, M6
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + P5
 B-T: m3, M3, m6, M6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + P5
 T-A: m3, M3, m6, M6
 B-T: P4, m7, M7

V-12 A-S: P4, m7, M7
 T-A: m3, M3, m6, M6
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + P5

V-13 A-S: m2, M2, P5
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + P5
 B-T: m2, M2, P5

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + P5
 T-A: m2, M2, P5
 B-T: m2, M2, P5

#3 C7/11 no R = Gm7/6 no 5 = FΔ9sus no 5 = Bb6#11 no 3 = E(7) #9b9b5 no 3, b7
= Db13#9b5 no R, b7 = Dm+/9/11 no R

Number of half steps between chord tones: 1 - 2 - 3 - 6

Possible intervals between the outer voices (B-S):

V-1: Aug4, M6, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-3, V-4: 1 octave + m3, 1 octave + P4, 1 octave + P5, 1 octave + M6

V-5, V-6, V13, V-14: 1 octave + Aug4, 1 octave + M6, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + m3, 2 octaves + Aug4

V-11, V-12: 2 octaves + m3, 2 octaves + P4, 2 octaves + P5, 2 octaves + M6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, m3, Aug4
T-A: m2, M2, m3, Aug4
B-T: m2, M2, m3, Aug4

V-2 A-S: m3, P4, P5, M6
T-A: m2, M2, m3, Aug4
B-T: m3, P4, P5, M6

V-3 A-S: Aug4, M6, m7, M7
T-A: m3, P4, P5, M6
B-T: m2, M2, m3, Aug4

V-4 A-S: m2, M2, m3, Aug4
T-A: m3, P4, P5, M6
B-T: Aug4, M6, m7, M7

V-5 A-S: m3, P4, P5, M6
T-A: Aug4, M6, m7, M7
B-T: m3, P4, P5, M6

V-6 A-S: m2, M2, m3, Aug4
T-A: m2, M2, m3, Aug4
B-T: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-7 A-S: m3, P4, P5, M6
T-A: m2, M2, m3, Aug4
B-T: 1 octave + m3, 1 octave + P4, 1 octave + P5, 1 octave + M6

V-8 A-S: Aug4, M6, m7, M7
T-A: Aug4, M6, m7, M7
B-T: Aug4, M6, m7, M7

V-9 A-S: 1 octave + m3, 1 octave + P4, 1 octave + P5, 1 octave + M6
T-A: m2, M2, m3, Aug4
B-T: m3, P4, P5, M6

V-10 A-S: m3, P4, P5, M6
T-A: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
B-T: m3, P4, P5, M6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
T-A: m3, P4, P5, M6
B-T: Aug4, M6, m7, M7

V-12 A-S: Aug4, M6, m7, M7
T-A: m3, P4, P5, M6
B-T: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-13 A-S: m2, M2, m3, Aug4
T-A: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
B-T: m2, M2, m3, Aug4

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
T-A: m2, M2, m3, Aug4
B-T: m2, M2, m3, Aug4

#4 C7/6 no 5 = Gb7#9b5 no R = BbΔ9#11 no 3, 5 = Gm13 no R, 5, b7 = A(7)#9b9 no 3, b7 = FΔ7/11 no R

Number of half steps between chord tones: 1 - 2 - 4 - 5

Possible intervals between the outer voices (B-S):

V-1: P5, m6, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-3, V-4: 1 octave + m3, 1 octave + Aug4, 1 octave + M6

V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + m6, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + M3, 2 octaves + P4

V-11, V-12: 2 octaves + m3, 2 octaves + Aug4, 2 octaves + M6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, M3, P4
 T-A: m2, M2, M3, P4
 B-T: m2, M2, M3, P4

V-2 A-S: m3, Aug4, M6
 T-A: m2, M2, M3, P4
 B-T: m3, Aug4, M6

V-3 A-S: P5, m6, m7, M7
 T-A: m3, Aug4, M6
 B-T: m2, M2, M3, P4

V-4 A-S: m2, M2, M3, P4
 T-A: m3, Aug4, M6
 B-T: P5, m6, m7, M7

V-5 A-S: m3, Aug4, M6
 T-A: P5, m6, m7, M7
 B-T: m3, Aug4, M6

V-6 A-S: m2, M2, M3, P4
 T-A: m2, M2, M3, P4
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-7 A-S: m3, Aug4, M6
 T-A: m2, M2, M3, P4
 B-T: 1 octave + m3, 1 octave + Aug4, 1 octave + M6

V-8 A-S: P5, m6, m7, M7
 T-A: P5, m6, m7, M7
 B-T: P5, m6, m7, M7

V-9 A-S: 1 octave + m3, 1 octave + Aug4, 1 octave + M6
 T-A: m2, M2, M3, P4
 B-T: m3, Aug4, M6

V-10 A-S: m3, Aug4, M6
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
 B-T: m3, Aug4, M6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
 T-A: m3, Aug4, M6
 B-T: P5, m6, m7, M7

V-12 A-S: P5, m6, m7, M7
 T-A: m3, Aug4, M6
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-13 A-S: m2, M2, M3, P4
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
 B-T: m2, M2, M3, P4

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
 T-A: m2, M2, M3, P4
 B-T: m2, M2, M3, P4

#5 CΔ9 no 3 = Am11 no R, 5 = D7/6sus no 5 = Gadd11 = F6/9/#11 no R, 3 = B(7)#9b9+ no 3, b7

Number of half steps between chord tones: 1 - 2 - 5 - 4

Possible intervals between the outer voices (B-S):

V-1: P5, m6, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-3, V-4: 1 octave + m3, 1 octave + P4, 1 octave + P5, 1 octave + M6

V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + m6, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + M3, 2 octaves + P4

V-11, V-12: 2 octaves + m3, 2 octaves + P4, 2 octaves + P5, 2 octaves + M6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, M3, P4
T-A: m2, M2, M3, P4
B-T: m2, M2, M3, P4

V-2 A-S: m3, P4, P5, M6
T-A: m2, M2, M3, P4
B-T: m3, P4, P5, M6

V-3 A-S: P5, m6, m7, M7
T-A: m3, P4, P5, M6
B-T: m2, M2, M3, P4

V-4 A-S: m2, M2, M3, P4
T-A: m3, P4, P5, M6
B-T: P5, m6, m7, M7

V-5 A-S: m3, P4, P5, M6
T-A: P5, m6, m7, M7
B-T: m3, P4, P5, M6

V-6 A-S: m2, M2, M3, P4
T-A: m2, M2, M3, P4
B-T: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-7 A-S: m3, P4, P5, M6
T-A: m2, M2, M3, P4
B-T: 1 octave + m3, 1 octave + P4, 1 octave + P5, 1 octave + M6

V-8 A-S: P5, m6, m7, M7
T-A: P5, m6, m7, M7
B-T: P5, m6, m7, M7

V-9 A-S: 1 octave + m3, 1 octave + P4, 1 octave + P5, 1 octave + M6
T-A: m2, M2, M3, P4
B-T: m3, P4, P5, M6

V-10 A-S: m3, P4, P5, M6
T-A: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
B-T: m3, P4, P5, M6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
T-A: m3, P4, P5, M6
B-T: P5, m6, m7, M7

V-12 A-S: P5, m6, m7, M7
T-A: m3, P4, P5, M6
B-T: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-13 A-S: m2, M2, M3, P4
T-A: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
B-T: m2, M2, M3, P4

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
T-A: m2, M2, M3, P4
B-T: m2, M2, M3, P4

#6 C(7) #9b5 no b7 = C° add b3 = Gb7/6/b5 no 3 = B11b9 no R, b7 = C#mΔ9/11 no R, 5 = EΔ9+ no 3 = Bb°9+/11 no R, b3, 6 = G°Δ7+/11 no R, b3, b5

Number of half steps between chord tones: 1 - 2 - 6 - 3

Possible intervals between the outer voices (B-S):

V-1: Aug4, M6, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-3, V-4: 1 octave + m3, 1 octave + M3, 1 octave + m6, 1 octave + M6

V-5, V-6, V13, V-14: 1 octave + Aug4, 1 octave + M6, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + m3, 2 octaves + Aug4

V-11, V-12: 2 octaves + m3, 2 octaves + M3, 2 octaves + m6, 2 octaves + M6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, m3, Aug4
 T-A: m2, M2, m3, Aug4
 B-T: m2, M2, m3, Aug4

V-2 A-S: m3, M3, m6, M6
 T-A: m2, M2, m3, Aug4
 B-T: m3, M3, m6, M6

V-3 A-S: Aug4, M6, m7, M7
 T-A: m3, M3, m6, M6
 B-T: m2, M2, m3, Aug4

V-4 A-S: m2, M2, m3, Aug4
 T-A: m3, M3, m6, M6
 B-T: Aug4, M6, m7, M7

V-5 A-S: m3, M3, m6, M6
 T-A: Aug4, M6, m7, M7
 B-T: m3, M3, m6, M6

V-6 A-S: m2, M2, m3, Aug4
 T-A: m2, M2, m3, Aug4
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-7 A-S: m3, M3, m6, M6
 T-A: m2, M2, m3, Aug4
 B-T: 1 octave + m3, 1 octave + M3, 1 octave + m6, 1 octave + M6

V-8 A-S: Aug4, M6, m7, M7
 T-A: Aug4, M6, m7, M7
 B-T: Aug4, M6, m7, M7

V-9 A-S: 1 octave + m3, 1 octave + M3, 1 octave + m6, 1 octave + M6
 T-A: m2, M2, m3, Aug4
 B-T: m3, M3, m6, M6

V-10 A-S: m3, M3, m6, M6
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 B-T: m3, M3, m6, M6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 T-A: m3, M3, m6, M6
 B-T: Aug4, M6, m7, M7

V-12 A-S: Aug4, M6, m7, M7
 T-A: m3, M3, m6, M6
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-13 A-S: m2, M2, m3, Aug4
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 B-T: m2, M2, m3, Aug4

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 T-A: m2, M2, m3, Aug4
 B-T: m2, M2, m3, Aug4

#7 C7/6 no 3 = Gm/9/11 = BbΔ13 no 3, 5 = A7#9b9 no 3, 5 = F11 no R, b7 = Gb(7)#9b9b5 no R, b7 = Eb6#11 no R = E°+/11 no R, 6 = C♯° Δ7+ no R, b3

Number of half steps between chord tones: 1 - 2 - 7 - 2

Possible intervals between the outer voices (B-S):

V-1: P4, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + P5

V-3, V-4: 1 octave + m3, 1 octave + M6

V-5, V-6, V13, V-14: 1 octave + P4, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + P5

V-11, V-12: 2 octaves + m3, 2 octaves + M6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, P5
T-A: m2, M2, P5
B-T: m2, M2, P5

V-2 A-S: m3, M6
T-A: m2, M2, P5
B-T: m3, M6

V-3 A-S: P4, m7, M7
T-A: m3, M6
B-T: m2, M2, P5

V-4 A-S: m2, M2, P5
T-A: m3, M6
B-T: P4, m7, M7

V-5 A-S: m3, M6
T-A: P4, m7, M7
B-T: m3, M6

V-6 A-S: m2, M2, P5
T-A: m2, M2, P5
B-T: 1 octave + m2, 1 octave + M2, 1 octave + P5

V-7 A-S: m3, M6
T-A: m2, M2, P5
B-T: 1 octave + m3, 1 octave + M6

V-8 A-S: P4, m7, M7
T-A: P4, m7, M7
B-T: P4, m7, M7

V-9 A-S: 1 octave + m3, 1 octave + M6
T-A: m2, M2, P5
B-T: m3, M6

V-10 A-S: m3, M6
T-A: 1 octave + m2, 1 octave + M2, 1 octave + P5
B-T: m3, M6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + P5
T-A: m3, M6
B-T: P4, m7, M7

V-12 A-S: P4, m7, M7
T-A: m3, M6
B-T: 1 octave + m2, 1 octave + M2, 1 octave + P5

V-13 A-S: m2, M2, P5
T-A: 1 octave + m2, 1 octave + M2, 1 octave + P5
B-T: m2, M2, P5

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + P5
T-A: m2, M2, P5
B-T: m2, M2, P5

#8 C11b9 no 5, b7 = Bbm/9/#11 no R, b7 = DbΔ7#9 no 5

Number of half steps between chord tones: 1 - 3 - 1 - 7

Possible intervals between the outer voices (B-S):

V-1: P4, M6, M7
 V-2: 1 octave + m2, 1 octave + m3, 1 octave + P5

V-3, V-4: 1 octave + M3, 1 octave + m6

V-5, V-6, V13, V-14: 1 octave + P4, 1 octave + M6, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + m3, 2 octaves + P5

V-11, V-12: 2 octaves + M3, 2 octaves + m6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, m3, P5
 T-A: m2, m3, P5
 B-T: m2, m3, P5

V-2 A-S: M3, m6
 T-A: m2, m3, P5
 B-T: M3, m6

V-3 A-S: P4, M6, M7
 T-A: M3, m6
 B-T: m2, m3, P5

V-4 A-S: m2, m3, P5
 T-A: M3, m6
 B-T: P4, M6, M7

V-5 A-S: M3, m6
 T-A: P4, M6, M7
 B-T: M3, m6

V-6 A-S: m2, m3, P5
 T-A: m2, m3, P5
 B-T: 1 octave + m2, 1 octave + m3, 1 octave + P5

V-7 A-S: M3, m6
 T-A: m2, m3, P5
 B-T: 1 octave + M3, 1 octave + m6

V-8 A-S: P4, M6, M7
 T-A: P4, M6, M7
 B-T: P4, M6, M7

V-9 A-S: 1 octave + M3, 1 octave + m6
 T-A: m2, m3, P5
 B-T: M3, m6

V-10 A-S: M3, m6
 T-A: 1 octave + m2, 1 octave + m3, 1 octave + P5
 B-T: M3, m6

V-11 A-S: 1 octave + m2, 1 octave + m3, 1 octave + P5
 T-A: M3, m6
 B-T: P4, M6, M7

V-12 A-S: P4, M6, M7
 T-A: M3, m6
 B-T: 1 octave + m2, 1 octave + m3, 1 octave + P5

V-13 A-S: m2, m3, P5
 T-A: 1 octave + m2, 1 octave + m3, 1 octave + P5
 B-T: m2, m3, P5

V-14 A-S: 1 octave + m2, 1 octave + m3, 1 octave + P5
 T-A: m2, m3, P5
 B-T: m2, m3, P5

#9 C7#11 no 3 = D11+ no R, 9 = A13#9b9 no R, 3, 5 = Gb(7)b9b5 no b7 = GmΔ7/11 no 5 = Eb(7)/6/#9 no R, b7 = E°9+ no R, 6 = Bb°9+ no b3, b5

Number of half steps between chord tones: 1 - 3 - 2 - 6

Possible intervals between the outer voices (B-S):

V-1: Aug4, M6, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-3, V-4: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6

V-5, V-6, V13, V-14: 1 octave + Aug4, 1 octave + M6, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + m3, 2 octaves + Aug4

V-11, V-12: 2 octaves + M3, 2 octaves + P4, 2 octaves + P5, 2 octaves + m6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, m3, Aug4
 T-A: m2, M2, m3, Aug4
 B-T: m2, M2, m3, Aug4

V-2 A-S: M3, P4, P5, m6
 T-A: m2, M2, m3, Aug4
 B-T: M3, P4, P5, m6

V-3 A-S: Aug4, M6, m7, M7
 T-A: M3, P4, P5, m6
 B-T: m2, M2, m3, Aug4

V-4 A-S: m2, M2, m3, Aug4
 T-A: M3, P4, P5, m6
 B-T: Aug4, M6, m7, M7

V-5 A-S: M3, P4, P5, m6
 T-A: Aug4, M6, m7, M7
 B-T: M3, P4, P5, m6

V-6 A-S: m2, M2, m3, Aug4
 T-A: m2, M2, m3, Aug4
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-7 A-S: M3, P4, P5, m6
 T-A: m2, M2, m3, Aug4
 B-T: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6

V-8 A-S: Aug4, M6, m7, M7
 T-A: Aug4, M6, m7, M7
 B-T: Aug4, M6, m7, M7

V-9 A-S: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6
 T-A: m2, M2, m3, Aug4
 B-T: M3, P4, P5, m6

V-10 A-S: M3, P4, P5, m6
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 B-T: M3, P4, P5, m6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 T-A: M3, P4, P5, m6
 B-T: Aug4, M6, m7, M7

V-12 A-S: Aug4, M6, m7, M7
 T-A: M3, P4, P5, m6
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-13 A-S: m2, M2, m3, Aug4
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 B-T: m2, M2, m3, Aug4

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 T-A: m2, M2, m3, Aug4
 B-T: m2, M2, m3, Aug4

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#10 C7#9 no R = Gb13b9 no R, 5 = A7b9#11 no R, 3 = Eb(7)b9 no b7 =
C#m6/9/#11 no R, 5 = EmΔ7b5 = E°Δ7 = Gb°7+ no b5 = Bb°7/11 no b3
```

Number of half steps between chord tones: 1 - 3 - 3 - 5

Possible intervals between the outer voices (B-S):

```
V-1: P5, M6, M7
V-2: 1 octave + m2, 1 octave + m3, 1 octave + P4
V-3, V-4: 1 octave + M3, 1 octave + Aug4, 1 octave + m6
V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + M6, 1 octave + M7
V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + m3, 2 octaves + P4
V-11, V-12: 2 octaves + M3, 2 octaves + Aug4, 2 octaves + m6
```

Possible intervals between adjacent pairs of voices:

V-1	A-S: m2, m3, P4 T-A: m2, m3, P4 B-T: m2, m3, P4
V-2	A-S: M3, Aug4, m6 T-A: m2, m3, P4 B-T: M3, Aug4, m6
V-3	A-S: P5, M6, M7 T-A: M3, Aug4, m6 B-T: m2, m3, P4
V-4	A-S: m2, m3, P4 T-A: M3, Aug4, m6 B-T: P5, M6, M7
V-5	A-S: M3, Aug4, m6 T-A: P5, M6, M7 B-T: M3, Aug4, m6
V-6	A-S: m2, m3, P4 T-A: m2, m3, P4 B-T: 1 octave + m2, 1 octave + m3, 1 octave + P4
V-7	A-S: M3, Aug4, m6 T-A: m2, m3, P4 B-T: 1 octave + M3, 1 octave + Aug4, 1 octave + m6
V-8	A-S: P5, M6, M7 T-A: P5, M6, M7 B-T: P5, M6, M7
V-9	A-S: 1 octave + M3, 1 octave + Aug4, 1 octave + m6 T-A: m2, m3, P4 B-T: M3, Aug4, m6
V-10	A-S: M3, Aug4, m6 T-A: 1 octave + m2, 1 octave + m3, 1 octave + P4 B-T: M3, Aug4, m6
V-11	A-S: 1 octave + m2, 1 octave + m3, 1 octave + P4 T-A: M3, Aug4, m6 B-T: P5, M6, M7
V-12	A-S: P5, M6, M7 T-A: M3, Aug4, m6 B-T: 1 octave + m2, 1 octave + m3, 1 octave + P4
V-13	A-S: m2, m3, P4 T-A: 1 octave + m2, 1 octave + m3, 1 octave + P4 B-T: m2, m3, P4
V-14	A-S: 1 octave + m2, 1 octave + m3, 1 octave + P4 T-A: m2, m3, P4 B-T: m2, m3, P4

#11 CmΔ7 = Am9b5 no R = D13b9sus no R, 5 = F9#11 no R, 3 = B(7)b9+ no b7

Number of half steps between chord tones: 1 - 3 - 4 - 4

Possible intervals between the outer voices (B-S):

V-1: m6, M6, M7
 V-2: 1 octave + m2, 1 octave + m3, 1 octave + M3

V-3, V-4: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6

V-5, V-6, V13, V-14: 1 octave + m6, 1 octave + M6, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + m3, 2 octaves + M3

V-11, V-12: 2 octaves + M3, 2 octaves + P4, 2 octaves + P5, 2 octaves + m6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, m3, M3
 T-A: m2, m3, M3
 B-T: m2, m3, M3

V-2 A-S: M3, P4, P5, m6
 T-A: m2, m3, M3
 B-T: M3, P4, P5, m6

V-3 A-S: m6, M6, M7
 T-A: M3, P4, P5, m6
 B-T: m2, m3, M3

V-4 A-S: m2, m3, M3
 T-A: M3, P4, P5, m6
 B-T: m6, M6, M7

V-5 A-S: M3, P4, P5, m6
 T-A: m6, M6, M7
 B-T: M3, P4, P5, m6

V-6 A-S: m2, m3, M3
 T-A: m2, m3, M3
 B-T: 1 octave + m2, 1 octave + m3, 1 octave + M3

V-7 A-S: M3, P4, P5, m6
 T-A: m2, m3, M3
 B-T: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6

V-8 A-S: m6, M6, M7
 T-A: m6, M6, M7
 B-T: m6, M6, M7

V-9 A-S: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6
 T-A: m2, m3, M3
 B-T: M3, P4, P5, m6

V-10 A-S: M3, P4, P5, m6
 T-A: 1 octave + m2, 1 octave + m3, 1 octave + M3
 B-T: M3, P4, P5, m6

V-11 A-S: 1 octave + m2, 1 octave + m3, 1 octave + M3
 T-A: M3, P4, P5, m6
 B-T: m6, M6, M7

V-12 A-S: m6, M6, M7
 T-A: M3, P4, P5, m6
 B-T: 1 octave + m2, 1 octave + m3, 1 octave + M3

V-13 A-S: m2, m3, M3
 T-A: 1 octave + m2, 1 octave + m3, 1 octave + M3
 B-T: m2, m3, M3

V-14 A-S: 1 octave + m2, 1 octave + m3, 1 octave + M3
 T-A: m2, m3, M3
 B-T: m2, m3, M3

#12 C with 3 and b3 = Gb13b9b5 no R, 3 = Eb13b9 no 5, b7 = B11b9+ no R, b7 = Am7/#11 no R = E°9+ no R, 6 = Db°Δ9 no R, 6 = Bb°9/11 no R, b3 = G°+/11 no b3, b5

Number of half steps between chord tones: 1 - 3 - 5 - 3

Possible intervals between the outer voices (B-S):

V-1: P5, M6, M7

V-2: 1 octave + m2, 1 octave + m3, 1 octave + P4

V-3, V-4: 1 octave + M3, 1 octave + m6

V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + M6, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + m3, 2 octaves + P4

V-11, V-12: 2 octaves + M3, 2 octaves + m6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, m3, P4
T-A: m2, m3, P4
B-T: m2, m3, P4

V-2 A-S: M3, m6
T-A: m2, m3, P4
B-T: M3, m6

V-3 A-S: P5, M6, M7
T-A: M3, m6
B-T: m2, m3, P4

V-4 A-S: m2, m3, P4
T-A: M3, m6
B-T: P5, M6, M7

V-5 A-S: M3, m6
T-A: P5, M6, M7
B-T: M3, m6

V-6 A-S: m2, m3, P4
T-A: m2, m3, P4
B-T: 1 octave + m2, 1 octave + m3, 1 octave + P4

V-7 A-S: M3, m6
T-A: m2, m3, P4
B-T: 1 octave + M3, 1 octave + m6

V-8 A-S: P5, M6, M7
T-A: P5, M6, M7
B-T: P5, M6, M7

V-9 A-S: 1 octave + M3, 1 octave + m6
T-A: m2, m3, P4
B-T: M3, m6

V-10 A-S: M3, m6
T-A: 1 octave + m2, 1 octave + m3, 1 octave + P4
B-T: M3, m6

V-11 A-S: 1 octave + m2, 1 octave + m3, 1 octave + P4
T-A: M3, m6
B-T: P5, M6, M7

V-12 A-S: P5, M6, M7
T-A: M3, m6
B-T: 1 octave + m2, 1 octave + m3, 1 octave + P4

V-13 A-S: m2, m3, P4
T-A: 1 octave + m2, 1 octave + m3, 1 octave + P4
B-T: m2, m3, P4

V-14 A-S: 1 octave + m2, 1 octave + m3, 1 octave + P4
T-A: m2, m3, P4
B-T: m2, m3, P4

#13 C7b9 no 5 = Eb13b9 no R, 3 = Gb7#11 no R = A(7)#9b9 no R, b7 = Ab11+ no R, b7 = Bb°/9 = G°7/11 no R = E°7+ no b3 = C#m6Δ7 no 5

Number of half steps between chord tones: 1 - 3 - 6 - 2

Possible intervals between the outer voices (B-S):

V-1: Aug4, M6, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-3, V-4: 1 octave + m3, 1 octave + M3, 1 octave + m6, 1 octave + M6

V-5, V-6, V13, V-14: 1 octave + Aug4, 1 octave + M6, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + m3, 2 octaves + Aug4

V-11, V-12: 2 octaves + m3, 2 octaves + M3, 2 octaves + m6, 2 octaves + M6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, m3, Aug4
 T-A: m2, M2, m3, Aug4
 B-T: m2, M2, m3, Aug4

V-2 A-S: m3, M3, m6, M6
 T-A: m2, M2, m3, Aug4
 B-T: m3, M3, m6, M6

V-3 A-S: Aug4, M6, m7, M7
 T-A: m3, M3, m6, M6
 B-T: m2, M2, m3, Aug4

V-4 A-S: m2, M2, m3, Aug4
 T-A: m3, M3, m6, M6
 B-T: Aug4, M6, m7, M7

V-5 A-S: m3, M3, m6, M6
 T-A: Aug4, M6, m7, M7
 B-T: m3, M3, m6, M6

V-6 A-S: m2, M2, m3, Aug4
 T-A: m2, M2, m3, Aug4
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-7 A-S: m3, M3, m6, M6
 T-A: m2, M2, m3, Aug4
 B-T: 1 octave + m3, 1 octave + M3, 1 octave + m6, 1 octave + M6

V-8 A-S: Aug4, M6, m7, M7
 T-A: Aug4, M6, m7, M7
 B-T: Aug4, M6, m7, M7

V-9 A-S: 1 octave + m3, 1 octave + M3, 1 octave + m6, 1 octave + M6
 T-A: m2, M2, m3, Aug4
 B-T: m3, M3, m6, M6

V-10 A-S: m3, M3, m6, M6
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 B-T: m3, M3, m6, M6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 T-A: m3, M3, m6, M6
 B-T: Aug4, M6, m7, M7

V-12 A-S: Aug4, M6, m7, M7
 T-A: m3, M3, m6, M6
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-13 A-S: m2, M2, m3, Aug4
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 B-T: m2, M2, m3, Aug4

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 T-A: m2, M2, m3, Aug4
 B-T: m2, M2, m3, Aug4

#14 CΔ7#11 no 3 = Am13 no R, 5 = D7/6/11 no R, 5 = Eb13#9+ no R, b7 = GΔ7/11 no 5

Number of half steps between chord tones: 1 - 4 - 1 - 6

Possible intervals between the outer voices (B-S):

V-1: Aug4, m6, M7
 V-2: 1 octave + m2, 1 octave + M3, 1 octave + Aug4

V-3, V-4: 1 octave + P4, 1 octave + P5

V-5, V-6, V13, V-14: 1 octave + Aug4, 1 octave + m6, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M3, 2 octaves + Aug4

V-11, V-12: 2 octaves + P4, 2 octaves + P5

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M3, Aug4
 T-A: m2, M3, Aug4
 B-T: m2, M3, Aug4

V-2 A-S: P4, P5
 T-A: m2, M3, Aug4
 B-T: P4, P5

V-3 A-S: Aug4, m6, M7
 T-A: P4, P5
 B-T: m2, M3, Aug4

V-4 A-S: m2, M3, Aug4
 T-A: P4, P5
 B-T: Aug4, m6, M7

V-5 A-S: P4, P5
 T-A: Aug4, m6, M7
 B-T: P4, P5

V-6 A-S: m2, M3, Aug4
 T-A: m2, M3, Aug4
 B-T: 1 octave + m2, 1 octave + M3, 1 octave + Aug4

V-7 A-S: P4, P5
 T-A: m2, M3, Aug4
 B-T: 1 octave + P4, 1 octave + P5

V-8 A-S: Aug4, m6, M7
 T-A: Aug4, m6, M7
 B-T: Aug4, m6, M7

V-9 A-S: 1 octave + P4, 1 octave + P5
 T-A: m2, M3, Aug4
 B-T: P4, P5

V-10 A-S: P4, P5
 T-A: 1 octave + m2, 1 octave + M3, 1 octave + Aug4
 B-T: P4, P5

V-11 A-S: 1 octave + m2, 1 octave + M3, 1 octave + Aug4
 T-A: P4, P5
 B-T: Aug4, m6, M7

V-12 A-S: Aug4, m6, M7
 T-A: P4, P5
 B-T: 1 octave + m2, 1 octave + M3, 1 octave + Aug4

V-13 A-S: m2, M3, Aug4
 T-A: 1 octave + m2, 1 octave + M3, 1 octave + Aug4
 B-T: m2, M3, Aug4

V-14 A-S: 1 octave + m2, 1 octave + M3, 1 octave + Aug4
 T-A: m2, M3, Aug4
 B-T: m2, M3, Aug4

#15 C13 no R, 5 = Gm6/9 no R = BbΔ7#11 no 5 = Gb7#9+ no R = A(7)b9sus no b7

Number of half steps between chord tones: 1 - 4 - 2 - 5

Possible intervals between the outer voices (B-S):

V-1: P5, m6, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-3, V-4: 1 octave + P4, 1 octave + Aug4, 1 octave + P5

V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + m6, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + M3, 2 octaves + P4

V-11, V-12: 2 octaves + P4, 2 octaves + Aug4, 2 octaves + P5

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, M3, P4
T-A: m2, M2, M3, P4
B-T: m2, M2, M3, P4

V-2 A-S: P4, Aug4, P5
T-A: m2, M2, M3, P4
B-T: P4, Aug4, P5

V-3 A-S: P5, m6, m7, M7
T-A: P4, Aug4, P5
B-T: m2, M2, M3, P4

V-4 A-S: m2, M2, M3, P4
T-A: P4, Aug4, P5
B-T: P5, m6, m7, M7

V-5 A-S: P4, Aug4, P5
T-A: P5, m6, m7, M7
B-T: P4, Aug4, P5

V-6 A-S: m2, M2, M3, P4
T-A: m2, M2, M3, P4
B-T: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-7 A-S: P4, Aug4, P5
T-A: m2, M2, M3, P4
B-T: 1 octave + P4, 1 octave + Aug4, 1 octave + P5

V-8 A-S: P5, m6, m7, M7
T-A: P5, m6, m7, M7
B-T: P5, m6, m7, M7

V-9 A-S: 1 octave + P4, 1 octave + Aug4, 1 octave + P5
T-A: m2, M2, M3, P4
B-T: P4, Aug4, P5

V-10 A-S: P4, Aug4, P5
T-A: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
B-T: P4, Aug4, P5

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
T-A: P4, Aug4, P5
B-T: P5, m6, m7, M7

V-12 A-S: P5, m6, m7, M7
T-A: P4, Aug4, P5
B-T: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-13 A-S: m2, M2, M3, P4
T-A: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
B-T: m2, M2, M3, P4

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
T-A: m2, M2, M3, P4
B-T: m2, M2, M3, P4

#16 CΔ7 = Am9 no R = FΔ9#11 no R, 3 = D13sus no R, 5 = B11b9+ no 3, b7

Number of half steps between chord tones: 1 - 4 - 3 - 4

Possible intervals between the outer voices (B-S):

V-1: m6, M6, M7
 V-2: 1 octave + m2, 1 octave + m3, 1 octave + M3

V-3, V-4: 1 octave + P4, 1 octave + P5

V-5, V-6, V13, V-14: 1 octave + m6, 1 octave + M6, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + m3, 2 octaves + M3

V-11, V-12: 2 octaves + P4, 2 octaves + P5

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, m3, M3
 T-A: m2, m3, M3
 B-T: m2, m3, M3

V-2 A-S: P4, P5
 T-A: m2, m3, M3
 B-T: P4, P5

V-3 A-S: m6, M6, M7
 T-A: P4, P5
 B-T: m2, m3, M3

V-4 A-S: m2, m3, M3
 T-A: P4, P5
 B-T: m6, M6, M7

V-5 A-S: P4, P5
 T-A: m6, M6, M7
 B-T: P4, P5

V-6 A-S: m2, m3, M3
 T-A: m2, m3, M3
 B-T: 1 octave + m2, 1 octave + m3, 1 octave + M3

V-7 A-S: P4, P5
 T-A: m2, m3, M3
 B-T: 1 octave + P4, 1 octave + P5

V-8 A-S: m6, M6, M7
 T-A: m6, M6, M7
 B-T: m6, M6, M7

V-9 A-S: 1 octave + P4, 1 octave + P5
 T-A: m2, m3, M3
 B-T: P4, P5

V-10 A-S: P4, P5
 T-A: 1 octave + m2, 1 octave + m3, 1 octave + M3
 B-T: P4, P5

V-11 A-S: 1 octave + m2, 1 octave + m3, 1 octave + M3
 T-A: P4, P5
 B-T: m6, M6, M7

V-12 A-S: m6, M6, M7
 T-A: P4, P5
 B-T: 1 octave + m2, 1 octave + m3, 1 octave + M3

V-13 A-S: m2, m3, M3
 T-A: 1 octave + m2, 1 octave + m3, 1 octave + M3
 B-T: m2, m3, M3

V-14 A-S: 1 octave + m2, 1 octave + m3, 1 octave + M3
 T-A: m2, m3, M3
 B-T: m2, m3, M3

#17 CmΔ9 no R = F13b5 no R, 3 = EbΔ7+ = B(7) #9+ no b7 = Bb/11/13/b9 no R, 5

Number of half steps between chord tones: 1 - 4 - 4 - 3

Possible intervals between the outer voices (B-S):

V-1: m6, M6, M7
 V-2: 1 octave + m2, 1 octave + m3, 1 octave + M3

V-3, V-4: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6

V-5, V-6, V13, V-14: 1 octave + m6, 1 octave + M6, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + m3, 2 octaves + M3

V-11, V-12: 2 octaves + M3, 2 octaves + P4, 2 octaves + P5, 2 octaves + m6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, m3, M3
 T-A: m2, m3, M3
 B-T: m2, m3, M3

V-2 A-S: M3, P4, P5, m6
 T-A: m2, m3, M3
 B-T: M3, P4, P5, m6

V-3 A-S: m6, M6, M7
 T-A: M3, P4, P5, m6
 B-T: m2, m3, M3

V-4 A-S: m2, m3, M3
 T-A: M3, P4, P5, m6
 B-T: m6, M6, M7

V-5 A-S: M3, P4, P5, m6
 T-A: m6, M6, M7
 B-T: M3, P4, P5, m6

V-6 A-S: m2, m3, M3
 T-A: m2, m3, M3
 B-T: 1 octave + m2, 1 octave + m3, 1 octave + M3

V-7 A-S: M3, P4, P5, m6
 T-A: m2, m3, M3
 B-T: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6

V-8 A-S: m6, M6, M7
 T-A: m6, M6, M7
 B-T: m6, M6, M7

V-9 A-S: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6
 T-A: m2, m3, M3
 B-T: M3, P4, P5, m6

V-10 A-S: M3, P4, P5, m6
 T-A: 1 octave + m2, 1 octave + m3, 1 octave + M3
 B-T: M3, P4, P5, m6

V-11 A-S: 1 octave + m2, 1 octave + m3, 1 octave + M3
 T-A: M3, P4, P5, m6
 B-T: m6, M6, M7

V-12 A-S: m6, M6, M7
 T-A: M3, P4, P5, m6
 B-T: 1 octave + m2, 1 octave + m3, 1 octave + M3

V-13 A-S: m2, m3, M3
 T-A: 1 octave + m2, 1 octave + m3, 1 octave + M3
 B-T: m2, m3, M3

V-14 A-S: 1 octave + m2, 1 octave + m3, 1 octave + M3
 T-A: m2, m3, M3
 B-T: m2, m3, M3

#18 Cm/9 = F13 no R, 3 = AbΔ7#11 no R = D11b9 no 3, 5 = Eb6Δ7 no R =
B(7)#9b9+ no R, b7 = Gb13b9b5+ no R, 3, b7

Number of half steps between chord tones: 1 - 4 - 5 - 2

Possible intervals between the outer voices (B-S):

V-1: P5, m6, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-3, V-4: 1 octave + m3, 1 octave + P4, 1 octave + P5, 1 octave + M6

V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + m6, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + M3, 2 octaves + P4

V-11, V-12: 2 octaves + m3, 2 octaves + P4, 2 octaves + P5, 2 octaves + M6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, M3, P4
T-A: m2, M2, M3, P4
B-T: m2, M2, M3, P4

V-2 A-S: m3, P4, P5, M6
T-A: m2, M2, M3, P4
B-T: m3, P4, P5, M6

V-3 A-S: P5, m6, m7, M7
T-A: m3, P4, P5, M6
B-T: m2, M2, M3, P4

V-4 A-S: m2, M2, M3, P4
T-A: m3, P4, P5, M6
B-T: P5, m6, m7, M7

V-5 A-S: m3, P4, P5, M6
T-A: P5, m6, m7, M7
B-T: m3, P4, P5, M6

V-6 A-S: m2, M2, M3, P4
T-A: m2, M2, M3, P4
B-T: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-7 A-S: m3, P4, P5, M6
T-A: m2, M2, M3, P4
B-T: 1 octave + m3, 1 octave + P4, 1 octave + P5, 1 octave + M6

V-8 A-S: P5, m6, m7, M7
T-A: P5, m6, m7, M7
B-T: P5, m6, m7, M7

V-9 A-S: 1 octave + m3, 1 octave + P4, 1 octave + P5, 1 octave + M6
T-A: m2, M2, M3, P4
B-T: m3, P4, P5, M6

V-10 A-S: m3, P4, P5, M6
T-A: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
B-T: m3, P4, P5, M6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
T-A: m3, P4, P5, M6
B-T: P5, m6, m7, M7

V-12 A-S: P5, m6, m7, M7
T-A: m3, P4, P5, M6
B-T: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-13 A-S: m2, M2, M3, P4
T-A: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
B-T: m2, M2, M3, P4

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
T-A: m2, M2, M3, P4
B-T: m2, M2, M3, P4

#19 C13#9 no R, 5 = Gb13#9 no R, 5

Number of half steps between chord tones: 1 - 5 - 1 - 5

Possible intervals between the outer voices (B-S):

V-1: P5, M7
 V-2: 1 octave + m2, 1 octave + P4

V-3, V-4: 1 octave + Aug4

V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + M7
 V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + P4
 V-11, V-12: 2 octaves + Aug4

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, P4
 T-A: m2, P4
 B-T: m2, P4

V-2 A-S: Aug4
 T-A: m2, P4
 B-T: Aug4

V-3 A-S: P5, M7
 T-A: Aug4
 B-T: m2, P4

V-4 A-S: m2, P4
 T-A: Aug4
 B-T: P5, M7

V-5 A-S: Aug4
 T-A: P5, M7
 B-T: Aug4

V-6 A-S: m2, P4
 T-A: m2, P4
 B-T: 1 octave + m2, 1 octave + P4

V-7 A-S: Aug4
 T-A: m2, P4
 B-T: 1 octave + Aug4

V-8 A-S: P5, M7
 T-A: P5, M7
 B-T: P5, M7

V-9 A-S: 1 octave + Aug4
 T-A: m2, P4
 B-T: Aug4

V-10 A-S: Aug4
 T-A: 1 octave + m2, 1 octave + P4
 B-T: Aug4

V-11 A-S: 1 octave + m2, 1 octave + P4
 T-A: Aug4
 B-T: P5, M7

V-12 A-S: P5, M7
 T-A: Aug4
 B-T: 1 octave + m2, 1 octave + P4

V-13 A-S: m2, P4
 T-A: 1 octave + m2, 1 octave + P4
 B-T: m2, P4

V-14 A-S: 1 octave + m2, 1 octave + P4
 T-A: m2, P4
 B-T: m2, P4

#20 C7/11 no 5 = FΔ7sus = Dm9+ = Gm7/6/11 no R, 5 = Bb/9/#11 no 3 = E(7)b9b5+ no 3, b7

Number of half steps between chord tones: 1 - 5 - 2 - 4

Possible intervals between the outer voices (B-S):

V-1: P5, m6, m7, M7
 V-2: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-3, V-4: 1 octave + P4, 1 octave + Aug4, 1 octave + P5

V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + m6, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + M3, 2 octaves + P4

V-11, V-12: 2 octaves + P4, 2 octaves + Aug4, 2 octaves + P5

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, M3, P4
 T-A: m2, M2, M3, P4
 B-T: m2, M2, M3, P4

V-2 A-S: P4, Aug4, P5
 T-A: m2, M2, M3, P4
 B-T: P4, Aug4, P5

V-3 A-S: P5, m6, m7, M7
 T-A: P4, Aug4, P5
 B-T: m2, M2, M3, P4

V-4 A-S: m2, M2, M3, P4
 T-A: P4, Aug4, P5
 B-T: P5, m6, m7, M7

V-5 A-S: P4, Aug4, P5
 T-A: P5, m6, m7, M7
 B-T: P4, Aug4, P5

V-6 A-S: m2, M2, M3, P4
 T-A: m2, M2, M3, P4
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-7 A-S: P4, Aug4, P5
 T-A: m2, M2, M3, P4
 B-T: 1 octave + P4, 1 octave + Aug4, 1 octave + P5

V-8 A-S: P5, m6, m7, M7
 T-A: P5, m6, m7, M7
 B-T: P5, m6, m7, M7

V-9 A-S: 1 octave + P4, 1 octave + Aug4, 1 octave + P5
 T-A: m2, M2, M3, P4
 B-T: P4, Aug4, P5

V-10 A-S: P4, Aug4, P5
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
 B-T: P4, Aug4, P5

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
 T-A: P4, Aug4, P5
 B-T: P5, m6, m7, M7

V-12 A-S: P5, m6, m7, M7
 T-A: P4, Aug4, P5
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-13 A-S: m2, M2, M3, P4
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
 B-T: m2, M2, M3, P4

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
 T-A: m2, M2, M3, P4
 B-T: m2, M2, M3, P4

#21 C11b9 no R, 5 = Bbm/#11 = E13b9b5 no 3, 5, b7 = Gm7b5/6 no R, 5

Number of half steps between chord tones: 1 - 5 - 3 - 3

Possible intervals between the outer voices (B-S):

V-1: P5, M6, M7

V-2: 1 octave + m2, 1 octave + m3, 1 octave + P4

V-3, V-4: 1 octave + M3, 1 octave + Aug4, 1 octave + m6

V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + M6, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + m3, 2 octaves + P4

V-11, V-12: 2 octaves + M3, 2 octaves + Aug4, 2 octaves + m6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, m3, P4
T-A: m2, m3, P4
B-T: m2, m3, P4

V-2 A-S: M3, Aug4, m6
T-A: m2, m3, P4
B-T: M3, Aug4, m6

V-3 A-S: P5, M6, M7
T-A: M3, Aug4, m6
B-T: m2, m3, P4

V-4 A-S: m2, m3, P4
T-A: M3, Aug4, m6
B-T: P5, M6, M7

V-5 A-S: M3, Aug4, m6
T-A: P5, M6, M7
B-T: M3, Aug4, m6

V-6 A-S: m2, m3, P4
T-A: m2, m3, P4
B-T: 1 octave + m2, 1 octave + m3, 1 octave + P4

V-7 A-S: M3, Aug4, m6
T-A: m2, m3, P4
B-T: 1 octave + M3, 1 octave + Aug4, 1 octave + m6

V-8 A-S: P5, M6, M7
T-A: P5, M6, M7
B-T: P5, M6, M7

V-9 A-S: 1 octave + M3, 1 octave + Aug4, 1 octave + m6
T-A: m2, m3, P4
B-T: M3, Aug4, m6

V-10 A-S: M3, Aug4, m6
T-A: 1 octave + m2, 1 octave + m3, 1 octave + P4
B-T: M3, Aug4, m6

V-11 A-S: 1 octave + m2, 1 octave + m3, 1 octave + P4
T-A: M3, Aug4, m6
B-T: P5, M6, M7

V-12 A-S: P5, M6, M7
T-A: M3, Aug4, m6
B-T: 1 octave + m2, 1 octave + m3, 1 octave + P4

V-13 A-S: m2, m3, P4
T-A: 1 octave + m2, 1 octave + m3, 1 octave + P4
B-T: m2, m3, P4

V-14 A-S: 1 octave + m2, 1 octave + m3, 1 octave + P4
T-A: m2, m3, P4
B-T: m2, m3, P4

#22 C11 no R, 5 = E7b9b5 no 3 = Bb/#11 = Dm/9+ = Gm7/6 no R = Db13#9b9 no R, 5, b7 = FΔ7/6sus no 5 = G#°9+ no R, 3 = B°Δ7/11 no R

Number of half steps between chord tones: 1 - 5 - 4 - 2

Possible intervals between the outer voices (B-S):

V-1: P5, m6, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-3, V-4: 1 octave + m3, 1 octave + Aug4, 1 octave + M6

V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + m6, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + M3, 2 octaves + P4

V-11, V-12: 2 octaves + m3, 2 octaves + Aug4, 2 octaves + M6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, M3, P4
 T-A: m2, M2, M3, P4
 B-T: m2, M2, M3, P4

V-2 A-S: m3, Aug4, M6
 T-A: m2, M2, M3, P4
 B-T: m3, Aug4, M6

V-3 A-S: P5, m6, m7, M7
 T-A: m3, Aug4, M6
 B-T: m2, M2, M3, P4

V-4 A-S: m2, M2, M3, P4
 T-A: m3, Aug4, M6
 B-T: P5, m6, m7, M7

V-5 A-S: m3, Aug4, M6
 T-A: P5, m6, m7, M7
 B-T: m3, Aug4, M6

V-6 A-S: m2, M2, M3, P4
 T-A: m2, M2, M3, P4
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-7 A-S: m3, Aug4, M6
 T-A: m2, M2, M3, P4
 B-T: 1 octave + m3, 1 octave + Aug4, 1 octave + M6

V-8 A-S: P5, m6, m7, M7
 T-A: P5, m6, m7, M7
 B-T: P5, m6, m7, M7

V-9 A-S: 1 octave + m3, 1 octave + Aug4, 1 octave + M6
 T-A: m2, M2, M3, P4
 B-T: m3, Aug4, M6

V-10 A-S: m3, Aug4, M6
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
 B-T: m3, Aug4, M6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
 T-A: m3, Aug4, M6
 B-T: P5, m6, m7, M7

V-12 A-S: P5, m6, m7, M7
 T-A: m3, Aug4, M6
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4

V-13 A-S: m2, M2, M3, P4
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
 B-T: m2, M2, M3, P4

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + M3, 1 octave + P4
 T-A: m2, M2, M3, P4
 B-T: m2, M2, M3, P4

#23 C7#9 no 5 = Gb7/6/#11 no R, 5 = C#mΔ13 no R, 5 = Eb13b9 no 3, b7 = A(7)#9b9#11 no R, 3, b7 = E°Δ7+ no b3 = Bb°9/11 no b3, 6 = G°/11+ no R, b5

Number of half steps between chord tones: 1 - 6 - 2 - 3

Possible intervals between the outer voices (B-S):

V-1: Aug4, M6, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-3, V-4: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6

V-5, V-6, V13, V-14: 1 octave + Aug4, 1 octave + M6, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + m3, 2 octaves + Aug4

V-11, V-12: 2 octaves + M3, 2 octaves + P4, 2 octaves + P5, 2 octaves + m6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, m3, Aug4
 T-A: m2, M2, m3, Aug4
 B-T: m2, M2, m3, Aug4

V-2 A-S: M3, P4, P5, m6
 T-A: m2, M2, m3, Aug4
 B-T: M3, P4, P5, m6

V-3 A-S: Aug4, M6, m7, M7
 T-A: M3, P4, P5, m6
 B-T: m2, M2, m3, Aug4

V-4 A-S: m2, M2, m3, Aug4
 T-A: M3, P4, P5, m6
 B-T: Aug4, M6, m7, M7

V-5 A-S: M3, P4, P5, m6
 T-A: Aug4, M6, m7, M7
 B-T: M3, P4, P5, m6

V-6 A-S: m2, M2, m3, Aug4
 T-A: m2, M2, m3, Aug4
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-7 A-S: M3, P4, P5, m6
 T-A: m2, M2, m3, Aug4
 B-T: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6

V-8 A-S: Aug4, M6, m7, M7
 T-A: Aug4, M6, m7, M7
 B-T: Aug4, M6, m7, M7

V-9 A-S: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6
 T-A: m2, M2, m3, Aug4
 B-T: M3, P4, P5, m6

V-10 A-S: M3, P4, P5, m6
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 B-T: M3, P4, P5, m6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 T-A: M3, P4, P5, m6
 B-T: Aug4, M6, m7, M7

V-12 A-S: Aug4, M6, m7, M7
 T-A: M3, P4, P5, m6
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-13 A-S: m2, M2, m3, Aug4
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 B-T: m2, M2, m3, Aug4

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
 T-A: m2, M2, m3, Aug4
 B-T: m2, M2, m3, Aug4

#24 Cm6/9 no 5 = F7/6 no R = D7b9 no 3 = B7#9b9 no R, 5 = EbΔ7/6/#11 no 3, 5
= A°/11 = F#°7+ no R

Number of half steps between chord tones: 1 - 6 - 3 - 2

Possible intervals between the outer voices (B-S):

V-1: Aug4, M6, m7, M7

V-2: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-3, V-4: 1 octave + m3, 1 octave + P4, 1 octave + P5, 1 octave + M6

V-5, V-6, V13, V-14: 1 octave + Aug4, 1 octave + M6, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + m3, 2 octaves + Aug4

V-11, V-12: 2 octaves + m3, 2 octaves + P4, 2 octaves + P5, 2 octaves + M6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, m3, Aug4
T-A: m2, M2, m3, Aug4
B-T: m2, M2, m3, Aug4

V-2 A-S: m3, P4, P5, M6
T-A: m2, M2, m3, Aug4
B-T: m3, P4, P5, M6

V-3 A-S: Aug4, M6, m7, M7
T-A: m3, P4, P5, M6
B-T: m2, M2, m3, Aug4

V-4 A-S: m2, M2, m3, Aug4
T-A: m3, P4, P5, M6
B-T: Aug4, M6, m7, M7

V-5 A-S: m3, P4, P5, M6
T-A: Aug4, M6, m7, M7
B-T: m3, P4, P5, M6

V-6 A-S: m2, M2, m3, Aug4
T-A: m2, M2, m3, Aug4
B-T: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-7 A-S: m3, P4, P5, M6
T-A: m2, M2, m3, Aug4
B-T: 1 octave + m3, 1 octave + P4, 1 octave + P5, 1 octave + M6

V-8 A-S: Aug4, M6, m7, M7
T-A: Aug4, M6, m7, M7
B-T: Aug4, M6, m7, M7

V-9 A-S: 1 octave + m3, 1 octave + P4, 1 octave + P5, 1 octave + M6
T-A: m2, M2, m3, Aug4
B-T: m3, P4, P5, M6

V-10 A-S: m3, P4, P5, M6
T-A: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
B-T: m3, P4, P5, M6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
T-A: m3, P4, P5, M6
B-T: Aug4, M6, m7, M7

V-12 A-S: Aug4, M6, m7, M7
T-A: m3, P4, P5, M6
B-T: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4

V-13 A-S: m2, M2, m3, Aug4
T-A: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
B-T: m2, M2, m3, Aug4

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + m3, 1 octave + Aug4
T-A: m2, M2, m3, Aug4
B-T: m2, M2, m3, Aug4

#25 Cm9 no 5 = D7b9+ no 3 = Eb7/6sus no R = Bb/9sus no 5 = DbΔ7/6 no 3 = Ab/9/#11 no R

Number of half steps between chord tones: 1 - 7 - 2 - 2

Possible intervals between the outer voices (B-S):

V-1: P4, m7, M7
 V-2: 1 octave + m2, 1 octave + M2, 1 octave + P5

V-3, V-4: 1 octave + m3, 1 octave + M3, 1 octave + m6, 1 octave + M6

V-5, V-6, V13, V-14: 1 octave + P4, 1 octave + m7, 1 octave + M7

V-7, V-8, V-9, V-10: 2 octaves + m2, 2 octaves + M2, 2 octaves + P5

V-11, V-12: 2 octaves + m3, 2 octaves + M3, 2 octaves + m6, 2 octaves + M6

Possible intervals between adjacent pairs of voices:

V-1 A-S: m2, M2, P5
 T-A: m2, M2, P5
 B-T: m2, M2, P5

V-2 A-S: m3, M3, m6, M6
 T-A: m2, M2, P5
 B-T: m3, M3, m6, M6

V-3 A-S: P4, m7, M7
 T-A: m3, M3, m6, M6
 B-T: m2, M2, P5

V-4 A-S: m2, M2, P5
 T-A: m3, M3, m6, M6
 B-T: P4, m7, M7

V-5 A-S: m3, M3, m6, M6
 T-A: P4, m7, M7
 B-T: m3, M3, m6, M6

V-6 A-S: m2, M2, P5
 T-A: m2, M2, P5
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + P5

V-7 A-S: m3, M3, m6, M6
 T-A: m2, M2, P5
 B-T: 1 octave + m3, 1 octave + M3, 1 octave + m6, 1 octave + M6

V-8 A-S: P4, m7, M7
 T-A: P4, m7, M7
 B-T: P4, m7, M7

V-9 A-S: 1 octave + m3, 1 octave + M3, 1 octave + m6, 1 octave + M6
 T-A: m2, M2, P5
 B-T: m3, M3, m6, M6

V-10 A-S: m3, M3, m6, M6
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + P5
 B-T: m3, M3, m6, M6

V-11 A-S: 1 octave + m2, 1 octave + M2, 1 octave + P5
 T-A: m3, M3, m6, M6
 B-T: P4, m7, M7

V-12 A-S: P4, m7, M7
 T-A: m3, M3, m6, M6
 B-T: 1 octave + m2, 1 octave + M2, 1 octave + P5

V-13 A-S: m2, M2, P5
 T-A: 1 octave + m2, 1 octave + M2, 1 octave + P5
 B-T: m2, M2, P5

V-14 A-S: 1 octave + m2, 1 octave + M2, 1 octave + P5
 T-A: m2, M2, P5
 B-T: m2, M2, P5

#26 C9 no 5 = F#7b5+ no R = D9+ no 3 = Gb7b5+ no R = E7b5+ no 3 =
 Ab9b5+ no R, b7 = Bb/9/#11 no 5

Number of half steps between chord tones: 2 - 2 - 2 - 6

Possible intervals between the outer voices (B-S):

V-1: Aug4, m7
 V-2: 1 octave + M2, 1 octave + Aug4

V-3, V-4: 1 octave + M3, 1 octave + m6
 V-5, V-6, V13, V-14: 1 octave + Aug4, 1 octave + m7
 V-7, V-8, V-9, V-10: 2 octaves + M2, 2 octaves + Aug4
 V-11, V-12: 2 octaves + M3, 2 octaves + m6

Possible intervals between adjacent pairs of voices:

V-1 A-S: M2, Aug4
 T-A: M2, Aug4
 B-T: M2, Aug4

V-2 A-S: M3, m6
 T-A: M2, Aug4
 B-T: M3, m6

V-3 A-S: Aug4, m7
 T-A: M3, m6
 B-T: M2, Aug4

V-4 A-S: M2, Aug4
 T-A: M3, m6
 B-T: Aug4, m7

V-5 A-S: M3, m6
 T-A: Aug4, m7
 B-T: M3, m6

V-6 A-S: M2, Aug4
 T-A: M2, Aug4
 B-T: 1 octave + M2, 1 octave + Aug4

V-7 A-S: M3, m6
 T-A: M2, Aug4
 B-T: 1 octave + M3, 1 octave + m6

V-8 A-S: Aug4, m7
 T-A: Aug4, m7
 B-T: Aug4, m7

V-9 A-S: 1 octave + M3, 1 octave + m6
 T-A: M2, Aug4
 B-T: M3, m6

V-10 A-S: M3, m6
 T-A: 1 octave + M2, 1 octave + Aug4
 B-T: M3, m6

V-11 A-S: 1 octave + M2, 1 octave + Aug4
 T-A: M3, m6
 B-T: Aug4, m7

V-12 A-S: Aug4, m7
 T-A: M3, m6
 B-T: 1 octave + M2, 1 octave + Aug4

V-13 A-S: M2, Aug4
 T-A: 1 octave + M2, 1 octave + Aug4
 B-T: M2, Aug4

V-14 A-S: 1 octave + M2, 1 octave + Aug4
 T-A: M2, Aug4
 B-T: M2, Aug4

#27 C/9 = Am7/11 no R = D11 no 3, 5 = Em7+ = FΔ13 no R, 3 = Gb7b9b5+ no R, 3
= Bb6/9/#11 no R, 5 = G6sus = B(7)#9b9sus+ no R, b7

Number of half steps between chord tones: 2 - 2 - 3 - 5

Possible intervals between the outer voices (B-S):

V-1: P5, M6, m7
V-2: 1 octave + M2, 1 octave + m3, 1 octave + P4
V-3, V-4: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6
V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + M6, 1 octave + m7
V-7, V-8, V-9, V-10: 2 octaves + M2, 2 octaves + m3, 2 octaves + P4
V-11, V-12: 2 octaves + M3, 2 octaves + P4, 2 octaves + P5, 2 octaves + m6

Possible intervals between adjacent pairs of voices:

V-1	A-S: M2, m3, P4 T-A: M2, m3, P4 B-T: M2, m3, P4
V-2	A-S: M3, P4, P5, m6 T-A: M2, m3, P4 B-T: M3, P4, P5, m6
V-3	A-S: P5, M6, m7 T-A: M3, P4, P5, m6 B-T: M2, m3, P4
V-4	A-S: M2, m3, P4 T-A: M3, P4, P5, m6 B-T: P5, M6, m7
V-5	A-S: M3, P4, P5, m6 T-A: P5, M6, m7 B-T: M3, P4, P5, m6
V-6	A-S: M2, m3, P4 T-A: M2, m3, P4 B-T: 1 octave + M2, 1 octave + m3, 1 octave + P4
V-7	A-S: M3, P4, P5, m6 T-A: M2, m3, P4 B-T: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6
V-8	A-S: P5, M6, m7 T-A: P5, M6, m7 B-T: P5, M6, m7
V-9	A-S: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6 T-A: M2, m3, P4 B-T: M3, P4, P5, m6
V-10	A-S: M3, P4, P5, m6 T-A: 1 octave + M2, 1 octave + m3, 1 octave + P4 B-T: M3, P4, P5, m6
V-11	A-S: 1 octave + M2, 1 octave + m3, 1 octave + P4 T-A: M3, P4, P5, m6 B-T: P5, M6, m7
V-12	A-S: P5, M6, m7 T-A: M3, P4, P5, m6 B-T: 1 octave + M2, 1 octave + m3, 1 octave + P4
V-13	A-S: M2, m3, P4 T-A: 1 octave + M2, 1 octave + m3, 1 octave + P4 B-T: M2, m3, P4
V-14	A-S: 1 octave + M2, 1 octave + m3, 1 octave + P4 T-A: M2, m3, P4 B-T: M2, m3, P4

#28 C7b5 = F#7b5 = D9+ no R = Ab9+ no R = E9b5+ no 3, b7 = Bb9b5+ no 3, b7

Number of half steps between chord tones: 2 - 2 - 4 - 4

Possible intervals between the outer voices (B-S):

V-1: m6, m7
 V-2: 1 octave + M2, 1 octave + M3
 V-3, V-4: 1 octave + M3, 1 octave + Aug4, 1 octave + m6
 V-5, V-6, V13, V-14: 1 octave + m6, 1 octave + m7
 V-7, V-8, V-9, V-10: 2 octaves + M2, 2 octaves + M3
 V-11, V-12: 2 octaves + M3, 2 octaves + Aug4, 2 octaves + m6

Possible intervals between adjacent pairs of voices:

V-1	A-S: M2, M3 T-A: M2, M3 B-T: M2, M3
V-2	A-S: M3, Aug4, m6 T-A: M2, M3 B-T: M3, Aug4, m6
V-3	A-S: m6, m7 T-A: M3, Aug4, m6 B-T: M2, M3
V-4	A-S: M2, M3 T-A: M3, Aug4, m6 B-T: m6, m7
V-5	A-S: M3, Aug4, m6 T-A: m6, m7 B-T: M3, Aug4, m6
V-6	A-S: M2, M3 T-A: M2, M3 B-T: 1 octave + M2, 1 octave + M3
V-7	A-S: M3, Aug4, m6 T-A: M2, M3 B-T: 1 octave + M3, 1 octave + Aug4, 1 octave + m6
V-8	A-S: m6, m7 T-A: m6, m7 B-T: m6, m7
V-9	A-S: 1 octave + M3, 1 octave + Aug4, 1 octave + m6 T-A: M2, M3 B-T: M3, Aug4, m6
V-10	A-S: M3, Aug4, m6 T-A: 1 octave + M2, 1 octave + M3 B-T: M3, Aug4, m6
V-11	A-S: 1 octave + M2, 1 octave + M3 T-A: M3, Aug4, m6 B-T: m6, m7
V-12	A-S: m6, m7 T-A: M3, Aug4, m6 B-T: 1 octave + M2, 1 octave + M3
V-13	A-S: M2, M3 T-A: 1 octave + M2, 1 octave + M3 B-T: M2, M3
V-14	A-S: 1 octave + M2, 1 octave + M3 T-A: M2, M3 B-T: M2, M3

#29 C6/9 no 5 = D9 no 3 = BbΔ9#11 no R, 5 = Am/11 = Gb7#9b5+ no R, 3 = E7sus+ = B7#9b9sus no R, 5 = Ab(7)b9b5+ no R, b7 = FΔ7/6 no R = G6/9sus no R

Number of half steps between chord tones: 2 - 2 - 5 - 3

Possible intervals between the outer voices (B-S):

V-1: P5, M6, m7
 V-2: 1 octave + M2, 1 octave + m3, 1 octave + P4
 V-3, V-4: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6
 V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + M6, 1 octave + m7
 V-7, V-8, V-9, V-10: 2 octaves + M2, 2 octaves + m3, 2 octaves + P4
 V-11, V-12: 2 octaves + M3, 2 octaves + P4, 2 octaves + P5, 2 octaves + m6

Possible intervals between adjacent pairs of voices:

V-1	A-S: M2, m3, P4 T-A: M2, m3, P4 B-T: M2, m3, P4
V-2	A-S: M3, P4, P5, m6 T-A: M2, m3, P4 B-T: M3, P4, P5, m6
V-3	A-S: P5, M6, m7 T-A: M3, P4, P5, m6 B-T: M2, m3, P4
V-4	A-S: M2, m3, P4 T-A: M3, P4, P5, m6 B-T: P5, M6, m7
V-5	A-S: M3, P4, P5, m6 T-A: P5, M6, m7 B-T: M3, P4, P5, m6
V-6	A-S: M2, m3, P4 T-A: M2, m3, P4 B-T: 1 octave + M2, 1 octave + m3, 1 octave + P4
V-7	A-S: M3, P4, P5, m6 T-A: M2, m3, P4 B-T: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6
V-8	A-S: P5, M6, m7 T-A: P5, M6, m7 B-T: P5, M6, m7
V-9	A-S: 1 octave + M3, 1 octave + P4, 1 octave + P5, 1 octave + m6 T-A: M2, m3, P4 B-T: M3, P4, P5, m6
V-10	A-S: M3, P4, P5, m6 T-A: 1 octave + M2, 1 octave + m3, 1 octave + P4 B-T: M3, P4, P5, m6
V-11	A-S: 1 octave + M2, 1 octave + m3, 1 octave + P4 T-A: M3, P4, P5, m6 B-T: P5, M6, m7
V-12	A-S: P5, M6, m7 T-A: M3, P4, P5, m6 B-T: 1 octave + M2, 1 octave + m3, 1 octave + P4
V-13	A-S: M2, m3, P4 T-A: 1 octave + M2, 1 octave + m3, 1 octave + P4 B-T: M2, m3, P4
V-14	A-S: 1 octave + M2, 1 octave + m3, 1 octave + P4 T-A: M2, m3, P4 B-T: M2, m3, P4

#30 C6/9 no R = G6/9 no 3 = A7sus = Em7/11 no 5 = F#13 no R, 5 = D/9sus =
 BbA7/6/#11 no R, 5 = Db(7)#9b9b5+ no R, 3, b7 = F#7#9b9+ no R, 3

Number of half steps between chord tones: 2 - 3 - 2 - 5

Possible intervals between the outer voices (B-S):

V-1: P5, M6, m7

V-2: 1 octave + M2, 1 octave + m3, 1 octave + P4

V-3, V-4: 1 octave + P4, 1 octave + P5

V-5, V-6, V13, V-14: 1 octave + P5, 1 octave + M6, 1 octave + m7

V-7, V-8, V-9, V-10: 2 octaves + M2, 2 octaves + m3, 2 octaves + P4

V-11, V-12: 2 octaves + P4, 2 octaves + P5

Possible intervals between adjacent pairs of voices:

V-1 A-S: M2, m3, P4
 T-A: M2, m3, P4
 B-T: M2, m3, P4

V-2 A-S: P4, P5
 T-A: M2, m3, P4
 B-T: P4, P5

V-3 A-S: P5, M6, m7
 T-A: P4, P5
 B-T: M2, m3, P4

V-4 A-S: M2, m3, P4
 T-A: P4, P5
 B-T: P5, M6, m7

V-5 A-S: P4, P5
 T-A: P5, M6, m7
 B-T: P4, P5

V-6 A-S: M2, m3, P4
 T-A: M2, m3, P4
 B-T: 1 octave + M2, 1 octave + m3, 1 octave + P4

V-7 A-S: P4, P5
 T-A: M2, m3, P4
 B-T: 1 octave + P4, 1 octave + P5

V-8 A-S: P5, M6, m7
 T-A: P5, M6, m7
 B-T: P5, M6, m7

V-9 A-S: 1 octave + P4, 1 octave + P5
 T-A: M2, m3, P4
 B-T: P4, P5

V-10 A-S: P4, P5
 T-A: 1 octave + M2, 1 octave + m3, 1 octave + P4
 B-T: P4, P5

V-11 A-S: 1 octave + M2, 1 octave + m3, 1 octave + P4
 T-A: P4, P5
 B-T: P5, M6, m7

V-12 A-S: P5, M6, m7
 T-A: P4, P5
 B-T: 1 octave + M2, 1 octave + m3, 1 octave + P4

V-13 A-S: M2, m3, P4
 T-A: 1 octave + M2, 1 octave + m3, 1 octave + P4
 B-T: M2, m3, P4

V-14 A-S: 1 octave + M2, 1 octave + m3, 1 octave + P4
 T-A: M2, m3, P4
 B-T: M2, m3, P4

#31 Cm7b5 = Ab9 no R = Ebm6 = D7b9+ no R = F11b9 no R,3 = Gb6/#11 no 5 = DbΔ13sus no R, 5

Number of half steps between chord tones: 2 - 3 - 3 - 4

Possible intervals between the outer voices (B-S):

V-1: m6, M6, m7
 V-2: 1 octave + M2, 1 octave + m3, 1 octave + M3
 V-3, V-4: 1 octave + P4, 1 octave + Aug4, 1 octave + P5
 V-5, V-6, V13, V-14: 1 octave + m6, 1 octave + M6, 1 octave + m7
 V-7, V-8, V-9, V-10: 2 octaves + M2, 2 octaves + m3, 2 octaves + M3
 V-11, V-12: 2 octaves + P4, 2 octaves + Aug4, 2 octaves + P5

Possible intervals between adjacent pairs of voices:

V-1	A-S: M2, m3, M3 T-A: M2, m3, M3 B-T: M2, m3, M3
V-2	A-S: P4, Aug4, P5 T-A: M2, m3, M3 B-T: P4, Aug4, P5
V-3	A-S: m6, M6, m7 T-A: P4, Aug4, P5 B-T: M2, m3, M3
V-4	A-S: M2, m3, M3 T-A: P4, Aug4, P5 B-T: m6, M6, m7
V-5	A-S: P4, Aug4, P5 T-A: m6, M6, m7 B-T: P4, Aug4, P5
V-6	A-S: M2, m3, M3 T-A: M2, m3, M3 B-T: 1 octave + M2, 1 octave + m3, 1 octave + M3
V-7	A-S: P4, Aug4, P5 T-A: M2, m3, M3 B-T: 1 octave + P4, 1 octave + Aug4, 1 octave + P5
V-8	A-S: m6, M6, m7 T-A: m6, M6, m7 B-T: m6, M6, m7
V-9	A-S: 1 octave + P4, 1 octave + Aug4, 1 octave + P5 T-A: M2, m3, M3 B-T: P4, Aug4, P5
V-10	A-S: P4, Aug4, P5 T-A: 1 octave + M2, 1 octave + m3, 1 octave + M3 B-T: P4, Aug4, P5
V-11	A-S: 1 octave + M2, 1 octave + m3, 1 octave + M3 T-A: P4, Aug4, P5 B-T: m6, M6, m7
V-12	A-S: m6, M6, m7 T-A: P4, Aug4, P5 B-T: 1 octave + M2, 1 octave + m3, 1 octave + M3
V-13	A-S: M2, m3, M3 T-A: 1 octave + M2, 1 octave + m3, 1 octave + M3 B-T: M2, m3, M3
V-14	A-S: 1 octave + M2, 1 octave + m3, 1 octave + M3 T-A: M2, m3, M3 B-T: M2, m3, M3

#32 Cm7 = Eb6 = AbΔ9 no R = F11 no R, 3 = DbΔ13#11 no R, 3,5 = Bb6/9sus no 5 = A7#9b9b5 no R, 3 = D11b9+ no R, 3 = G°+/11

Number of half steps between chord tones: 2 - 3 - 4 - 3

Possible intervals between the outer voices (B-S):

V-1: m6, M6, m7

V-2: 1 octave + M2, 1 octave + m3, 1 octave + M3

V-3, V-4: 1 octave + P4, 1 octave + P5

V-5, V-6, V13, V-14: 1 octave + m6, 1 octave + M6, 1 octave + m7

V-7, V-8, V-9, V-10: 2 octaves + M2, 2 octaves + m3, 2 octaves + M3

V-11, V-12: 2 octaves + P4, 2 octaves + P5

Possible intervals between adjacent pairs of voices:

V-1 A-S: M2, m3, M3
T-A: M2, m3, M3
B-T: M2, m3, M3

V-2 A-S: P4, P5
T-A: M2, m3, M3
B-T: P4, P5

V-3 A-S: m6, M6, m7
T-A: P4, P5
B-T: M2, m3, M3

V-4 A-S: M2, m3, M3
T-A: P4, P5
B-T: m6, M6, m7

V-5 A-S: P4, P5
T-A: m6, M6, m7
B-T: P4, P5

V-6 A-S: M2, m3, M3
T-A: M2, m3, M3
B-T: 1 octave + M2, 1 octave + m3, 1 octave + M3

V-7 A-S: P4, P5
T-A: M2, m3, M3
B-T: 1 octave + P4, 1 octave + P5

V-8 A-S: m6, M6, m7
T-A: m6, M6, m7
B-T: m6, M6, m7

V-9 A-S: 1 octave + P4, 1 octave + P5
T-A: M2, m3, M3
B-T: P4, P5

V-10 A-S: P4, P5
T-A: 1 octave + M2, 1 octave + m3, 1 octave + M3
B-T: P4, P5

V-11 A-S: 1 octave + M2, 1 octave + m3, 1 octave + M3
T-A: P4, P5
B-T: m6, M6, m7

V-12 A-S: m6, M6, m7
T-A: P4, P5
B-T: 1 octave + M2, 1 octave + m3, 1 octave + M3

V-13 A-S: M2, m3, M3
T-A: 1 octave + M2, 1 octave + m3, 1 octave + M3
B-T: M2, m3, M3

V-14 A-S: 1 octave + M2, 1 octave + m3, 1 octave + M3
T-A: M2, m3, M3
B-T: M2, m3, M3

#33 C7b5 = F#7b5 = D9+ no R = Ab9+ no R = E9b5+ no 3, b7 = Bb9b5+ no 3, b7

Number of half steps between chord tones: 2 - 4 - 2 - 4

Possible intervals between the outer voices (B-S):

V-1: m6, m7
 V-2: 1 octave + M2, 1 octave + M3

V-3, V-4: 1 octave + Aug4

V-5, V-6, V13, V-14: 1 octave + m6, 1 octave + m7
 V-7, V-8, V-9, V-10: 2 octaves + M2, 2 octaves + M3
 V-11, V-12: 2 octaves + Aug4

Possible intervals between adjacent pairs of voices:

V-1 A-S: M2, M3
 T-A: M2, M3
 B-T: M2, M3

V-2 A-S: Aug4
 T-A: M2, M3
 B-T: Aug4

V-3 A-S: m6, m7
 T-A: Aug4
 B-T: M2, M3

V-4 A-S: M2, M3
 T-A: Aug4
 B-T: m6, m7

V-5 A-S: Aug4
 T-A: m6, m7
 B-T: Aug4

V-6 A-S: M2, M3
 T-A: M2, M3
 B-T: 1 octave + M2, 1 octave + M3

V-7 A-S: Aug4
 T-A: M2, M3
 B-T: 1 octave + Aug4

V-8 A-S: m6, m7
 T-A: m6, m7
 B-T: m6, m7

V-9 A-S: 1 octave + Aug4
 T-A: M2, M3
 B-T: Aug4

V-10 A-S: Aug4
 T-A: 1 octave + M2, 1 octave + M3
 B-T: Aug4

V-11 A-S: 1 octave + M2, 1 octave + M3
 T-A: Aug4
 B-T: m6, m7

V-12 A-S: m6, m7
 T-A: Aug4
 B-T: 1 octave + M2, 1 octave + M3

V-13 A-S: M2, M3
 T-A: 1 octave + M2, 1 octave + M3
 B-T: M2, M3

V-14 A-S: 1 octave + M2, 1 octave + M3
 T-A: M2, M3
 B-T: M2, M3

#34 C7 = F#7b9b5 no R = A7#9b9 no R, 3 = E(7)#9b5+ no 3, b7 = Eb13b9 no R, b7 = Bb6/9/#11 no 3, 5 = FΔ9sus no R

Number of half steps between chord tones: 2 - 4 - 3 - 3

Possible intervals between the outer voices (B-S):

V-1: m6, M6, m7

V-2: 1 octave + M2, 1 octave + m3, 1 octave + M3

V-3, V-4: 1 octave + P4, 1 octave + Aug4, 1 octave + P5

V-5, V-6, V13, V-14: 1 octave + m6, 1 octave + M6, 1 octave + m7

V-7, V-8, V-9, V-10: 2 octaves + M2, 2 octaves + m3, 2 octaves + M3

V-11, V-12: 2 octaves + P4, 2 octaves + Aug4, 2 octaves + P5

Possible intervals between adjacent pairs of voices:

V-1 A-S: M2, m3, M3
T-A: M2, m3, M3
B-T: M2, m3, M3

V-2 A-S: P4, Aug4, P5
T-A: M2, m3, M3
B-T: P4, Aug4, P5

V-3 A-S: m6, M6, m7
T-A: P4, Aug4, P5
B-T: M2, m3, M3

V-4 A-S: M2, m3, M3
T-A: P4, Aug4, P5
B-T: m6, M6, m7

V-5 A-S: P4, Aug4, P5
T-A: m6, M6, m7
B-T: P4, Aug4, P5

V-6 A-S: M2, m3, M3
T-A: M2, m3, M3
B-T: 1 octave + M2, 1 octave + m3, 1 octave + M3

V-7 A-S: P4, Aug4, P5
T-A: M2, m3, M3
B-T: 1 octave + P4, 1 octave + Aug4, 1 octave + P5

V-8 A-S: m6, M6, m7
T-A: m6, M6, m7
B-T: m6, M6, m7

V-9 A-S: 1 octave + P4, 1 octave + Aug4, 1 octave + P5
T-A: M2, m3, M3
B-T: P4, Aug4, P5

V-10 A-S: P4, Aug4, P5
T-A: 1 octave + M2, 1 octave + m3, 1 octave + M3
B-T: P4, Aug4, P5

V-11 A-S: 1 octave + M2, 1 octave + m3, 1 octave + M3
T-A: P4, Aug4, P5
B-T: m6, M6, m7

V-12 A-S: m6, M6, m7
T-A: P4, Aug4, P5
B-T: 1 octave + M2, 1 octave + m3, 1 octave + M3

V-13 A-S: M2, m3, M3
T-A: 1 octave + M2, 1 octave + m3, 1 octave + M3
B-T: M2, m3, M3

V-14 A-S: 1 octave + M2, 1 octave + m3, 1 octave + M3
T-A: M2, m3, M3
B-T: M2, m3, M3

#35 C°7 = A°7 = F#°7 = Eb°7 = B7b9 no R = Ab7b9 no R = F7b9 no R = D7b9 no R =
 Db all four ° extensions = Bb all 4 ° ext. = G all 4 ° ext. = E all 4 ° ext.

Number of half steps between chord tones: 3 - 3 - 3 - 3

Possible intervals between the outer voices (B-S):

V-1: M6
 V-2: 1 octave + m3
 V-3, V-4: 1 octave + Aug4
 V-5, V-6, V13, V-14: 1 octave + M6
 V-7, V-8, V-9, V-10: 2 octaves + m3
 V-11, V-12: 2 octaves + Aug4

Possible intervals between adjacent pairs of voices:

V-1	A-S: m3 T-A: m3 B-T: m3
V-2	A-S: Aug4 T-A: m3 B-T: Aug4
V-3	A-S: M6 T-A: Aug4 B-T: m3
V-4	A-S: m3 T-A: Aug4 B-T: M6
V-5	A-S: Aug4 T-A: M6 B-T: Aug4
V-6	A-S: m3 T-A: m3 B-T: 1 octave + m3
V-7	A-S: Aug4 T-A: m3 B-T: 1 octave + Aug4
V-8	A-S: M6 T-A: M6 B-T: M6
V-9	A-S: 1 octave + Aug4 T-A: m3 B-T: Aug4
V-10	A-S: Aug4 T-A: 1 octave + m3 B-T: Aug4
V-11	A-S: 1 octave + m3 T-A: Aug4 B-T: M6
V-12	A-S: M6 T-A: Aug4 B-T: 1 octave + m3
V-13	A-S: m3 T-A: 1 octave + m3 B-T: m3
V-14	A-S: 1 octave + m3 T-A: m3 B-T: m3