```
while H is not empty do
25:
26:
           \langle d_i, dist[d_i] \rangle \leftarrow \text{deheap}(H)
           if d_i \in doors then
27:
28:
               doors \leftarrow doors \setminus \{d_i\}
              if dist_m > dist_V(p_s, d_s) + dist[d_i] + dist_V(p_t, d_i)
29:
              then
                 dist_m \leftarrow dist_V(p_s, d_s) + dist[d_i] + dist_V(p_t, d_i)
30:
31:
              (v, d_i) \leftarrow prev[d_i]
32:
              while d_i \neq d_s do
                 if d_i \in doors_s and d_i > d_s then
33:
                     dists[d_i][d_i] \leftarrow dist[d_i] - dist[d_i]
34:
                     if dist_m > dist_V(p_s, d_i) + dist_S[d_i][d_i] +
35:
                     dist_V(p_t, d_i) then
                        dist_m \leftarrow dist_V(p_s, d_i) + dists[d_i][d_i] +
36:
                        dist_V(p_t, d_i)
37:
                  (v, d_i) \leftarrow prev[d_i]
38:
              if doors = \emptyset then
39:
                 break
40:
           else if d_i \in doors_s and d_i < d_s then
41:
              for each door d_i \in doors do
42:
                 dists[d_s][d_i] \leftarrow dist[d_i] + dists[d_i][d_i]
                                       dist_V(p_s, d_s) + dists[d_s][d_i]
43:
                 if dist_m >
                 dist_V(p_t,d_i) then
                     dist_m \leftarrow dist_V(p_s, d_s) + dist_S[d_s][d_i] +
44:
                     dist_V(p_t, d_i)
              break
45:
46:
           mark door d_i as visited
           parts \leftarrow D2P_{\square}(d_i)
47:
48:
           for each partition v \in parts do
49:
              for each unvisited door d_i \in P2D(v) do
                 if d_i \in P2D_{\square}(v) then
50:
51:
                     if dist[d_i] + G_{dist} \cdot f_{d2d}(v, d_i, d_i) < dist[d_i] then
                        dist[d_i] \leftarrow dist[d_i] + G_{dist}.f_{d2d}(v, d_i, d_j)
52:
53:
                        prev[d_i] \leftarrow (v, d_i)
54: return dist_m
```